2001

A Study of the Relationship Between Police Stress and Moral Reasoning, Coping Mechanisms, and Selected Demographic Variables

Harvey J. Burnett
Andrews University, harveyb@andrews.edu

INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins,. and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

Bell & Howell Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

UMI®

Andrews University

School of Education

A STUDY OF THE RELATIONSHIP BETWEEN POLICE STRESS AND MORAL REASONING, COPING MECHANISMS, AND SELECTED DEMOGRAPHIC VARIABLES

A Dissertation

Presented in Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

by

Harvey J. Burnett, Jr.

May 2001

ABSTRACT

A STUDY OF THE RELATIONSHIP BETWEEN POLICE STRESS AND MORAL REASONING, COPING MECHANISMS, AND SELECTED DEMOGRAPHIC VARIABLES

by

Harvey J. Burnett, Jr.

Chair: Lenore S. Brantley

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: A STUDY OF THE RELATIONSHIP BETWEEN POLICE STRESS AND MORAL REASONING, COPING MECHANISMS, AND SELECTED DEMOGRAPHIC VARIABLES

Name of researcher: Harvey J. Burnett, Jr.

Name and degree of faculty chair: Lenore S. Brantley, Ed.D.

Date completed: May 2001

Problem

Past research provides information on stress and its relationship to the law enforcement officer's coping mechanisms. However, there is no research on how the element of moral reasoning relates within the conceptual framework of police stress and coping. This present study investigated the relationship between police stress and moral reasoning, coping mechanisms, and selected demographic variables among police officers.

Method

The subjects for this study were 71 full-time certified law enforcement officers in Berrien, Cass, and Van Buren counties of Michigan. A brief demographic questionnaire

was utilized, followed by the Police Stress Survey (PSS), the Defining Issues Test (DIT), and the Coping Response Inventory (CRI). Pearson r, Spearman Rho, and ANOVA with post hoc tests analyses were used to analyze the relationship of police stress to moral reasoning, coping mechanisms, age, years of law enforcement experience, years of education, religious affiliation, frequency of church attendance, and community environment in which the officer serves.

Results

The present study found that 88% of police subjects considered police stress (administrative/organizational pressure and physical/psychological threats) moderately stressful. The present study also found no significant correlation between police stress and moral reasoning, coping mechanisms (problem-focused and emotion-focused coping), age, years of law enforcement experience, years of education, religious affiliation, frequency of church attendance, and the community environment in which the officer serves.

Conclusions

According to this study, it appears that police stress may not be associated with postconventional thinking, coping mechanisms, age, years of law enforcement experience, years of education, religious affiliation, frequency of church attendance, and type of environment in which the officer serves for law enforcement officers within the Tri-County area. More empirical research is needed to clarify the relationship between police stress, moral reasoning, and coping.

A STUDY OF THE RELATIONSHIP BETWEEN POLICE STRESS AND MORAL REASONING, COPING MECHANISMS, AND SELECTED DEMOGRAPHIC VARIABLES

A dissertation
presented in partial fulfillment
of the requirements for the degree of
Doctor of Philosophy

by

Harvey J. Burnett, Jr.

APPROVAL BY THE COMMITTEE:

Chair: Lenore S. Brantley

Dean, School of Education
Karen Graham

Member: Frederick A. Kosinski, Jr.

Member: Jimmy Kijai

External: James North

4-23-01
Date approved

To the loving memory of
Harvey J. Burnett, Sr.,
Ralph Geter,
and
Mildred Geter.
We will be joined
together again at
Christ's second coming.

TABLE OF CONTENTS

LIST OF ILLUSTRATIONS

LIST OF TABLES

ACKNOWLEDGMENTS

At this time, I would like to express my sincere appreciation and gratitude to everyone who provided help and support throughout this tedious and grueling process. Without their support I would not have successfully completed this project.

First, I would like to give a deep and adamant "thank you" and praise to my Heavenly Father, my Lord and Savior, Jesus Christ, and the Holy Spirit, who have guided and carried me throughout this entire process and provided me with success. Hence, "I can do all things through Christ who strengthens me."

Next, I would like to extend a sincere appreciation to my wonderful wife, Bella, and my three precious children, Joshua, Micaela, and Rebekah, who have been patient and provided a constant source of support and encouragement. I love you all so much.

My overwhelming and sincere thanks and gratefulness to the members of my committee: my Chair, Dr. Lenore Brantley, who provided constant direction, encouragement, mentorship, support, and friendship throughout this entire project. A special thank-you to Dr. Jimmy Kijai, who provided the statistical wizardry, patience, and insight necessary to help me make this research project a success. I thank Dr. Frederick Kosinski, who provided input, hope, and support to this project. Finally, a very special thank-you to Dr. Jim North, who provided time and support in helping me to complete this project.

I would like to convey a special thanks and heartfelt appreciation to my fellow

colleagues in law enforcement, who have provided constant support and encouragement throughout this project, especially those who took the time to complete the surveys and provided verbal feedback about their concerns in the field of law enforcement service. In particular, Chief Brian Russell, who has been and continues to be a wealth of support and encouragement; Pam and Sgt. Tony Aviles, who unconditionally assisted me in some of the "leg-work" of this project; Officers Chief J. C. Colburn, Capt. Rick Huff, Lt. Roger Lange, Sgt. J.T. Adkerson, Sgt. Dave Capron, Derrick Arwood, Brian Bennett, Mike Haug, Kendall Jeppesen, Don Lighthart, Randy Miller, and Shelia Palmisano, Deputies Tim Ganus, Lt. Bill Marx, Greg and Tina Morrow, Kenneth Richcreek, Rick Knapp, Al Strukel; Troopers F/Lt. Charlene Wilson, F/Lt. Jerry Sunday, and Sgt. Dan Podjan; and all of the other law enforcement officers, Chiefs of Police, Sheriffs, Post Commanders, and police agencies in the Tri-County area, who supported me in so many ways, too many to mention.

A special note of thanks to Dr. Ralph Tobias and Dr. John Duffy, who have been constant sources of guidance, preparation, and encouragement throughout this project. Much appreciation goes to Buchanan School Superintendent, Dave Casey, and my fellow board members, who have been graciously patient and supportive. I would also like to thank the many teachers, counselors, students, and support staff who have been a continuous source of support and encouragement throughout the many ups and downs with this project.

To my mother, Janice Burnett, who has always been there for me spiritually, emotionally, socially, and psychologically, "I love you mom!" A special thanks goes to my younger siblings, Todd and Sue Lynn Burnett, who have always provided their love,

support, and encouragement in all my endeavors. A note of thanks to my son, nephews, and nieces, Michael Dallas, Roman Burnett-Wright, Marlon and Faith Burnett, and Daniella McPherson, who have always been an inspiration.

Finally, a special and sincere thank-you to my late father, Harvey Burnett, Sr., and grandparents, Ralph and Mildred Geter. They have and continue to be a wellspring of love, support, inspiration, and encouragement in all that I do. I miss you very much.

CHAPTER I

INTRODUCTION

Background

Many consider the law enforcement profession unique. This profession requires the individual officer to interact with a diverse population on a daily basis. As such, policing places much responsibility on the individual officer. Police officers are not only responsible for maintaining public peace, the protection of property, and safeguarding lives, but uniquely hold the power and authority to use force (up to and including deadly force) in performing their duties. There is no such thing as a "routine" situation (i.e., traffic stop, family disturbance, or suspicious situation call) in the policing profession. Each situation within policing is potentially dangerous and life threatening. For example, in 1997 there were 65 law enforcement officers slain in the line of duty while, on average, 11 of every 100 law enforcement officers in the nation were assaulted (Uniform Crime Report of Law Enforcement Officers Killed and Assaulted, 1997).

Therefore, many aspects of police work encountered by individual police officers are considered highly stressful and exact a "high emotional toll" (Bonifacio, 1991; Terry, 1983). Law enforcement is notably considered a profession requiring police officers to use common sense and good judgment, even under conditions of severe stress (Hockstedler, 1981; Lefkowitz, 1977, Lehrfeld; 1989; Symonds, 1970).

Since the pioneering studies of Kroes, Mangolies, and Hurrell (1974), Kroes

(1976, 1985), and Hurrell and Kroes (1975) that identified key sources of stress related to policing, researchers have attempted to examine how these various stressors have affected police officers. For instance, Alkus and Padesky (1983) reviewed the literature on stress-related issues involving police officers and found that a failure to reduce or relieve stress-related anxiety leads to such cognitive-emotional repercussions as guilt, anger, suspiciousness, depression, or aggression. Alkus and Padesky further indicated that displacement of anger, generalized over hostility, a defensive facade of overconfidence, aggression, excessive use of force, substance use and abuse, and/or risk-taking behaviors may be employed as coping mechanisms and anxiety-reducing behaviors.

Hans Selye (1974, 1976) demonstrated that the human body undergoes various automatic nervous system stress reactions that progress through a series of stages in order to adapt and restore balance. If these so-called "fight or flight" responses are left unrelieved, they will produce an accumulation in tension eventually resulting in what Selye called "diseases of adaptation." This may result in physiological illnesses such as ulcers or coronary heart disease and emotional and behavioral pathologies (Alkus & Padesky, 1983).

Since certain internal physiological reactions occur when the body is under stress, it is reasonable to assume that other aspects of the human experience, such as moral reasoning (Berg et al., 1994), mirror a similar automatic nervous system stress-reactions process. This process is intended to reduce anxiety and tension through implementing a particular coping mechanism that allows adaptation and the restoration of balance (Burke,

1994; Franzen & Heffernan, 1983).

Given the very nature of the law enforcement profession, it is believed that police stress should have some effect on the officer's moral reasoning ability and type of coping strategy implemented. Several studies have examined how coping and well-being among police officers relate to police stress (Hart, Wearing, & Headley, 1995; Kirkcaldy, Furnham, & Cooper, 1994; Wearing & Hart, 1996). Practically no research studies directly contribute to understanding the relationship between a police officer's perception of stress, moral reasoning, and coping mechanisms implemented.

Statement of the Problem

Past research provides information on police stress and its relationship to such variables as the law enforcement officers' personality traits and coping mechanisms (Hart et al., 1995; Lehrfeld, 1989; Wearing & Hart, 1996; Wolford, 1993). However, there is no empirical research on how the element of moral reasoning relates within the conceptual framework of police stress and coping. The nature of police work requires police officers to enforce established laws, protect lives and property, and observe the tragedy of others. In addition, they must handle stress effectively, as well as exhibit high moral standards while they are both on and off duty. In fact, the majority of law enforcement agencies utilize civil service tests, physical agility tests, and psychological tests in order to select psychologically, morally, physically, and intellectually sound individuals to serve the public as law enforcement officers.

It is reasonable to assume that police officers who experience higher stress levels will tend to exhibit either a higher or lower level of moral reasoning depending on their

perception of the stressor. These factors combined will prompt the officer to use either a more problem-focused or emotion-focused coping response mechanism in order to reduce stress. Because no research studies have explored how police stress is related to moral reasoning and coping style, this research study will attempt to examine the relationship between these variables.

Purpose of the Study

The purpose of this study was to examine the relationship between police stress and moral reasoning, coping style, and selected demographic variables (age, years of law enforcement experience, years of education, religious affiliation, frequency of church attendance, and the community environment in which the officer serves) in a population of full-time Michigan Law Enforcement Officers Training Council (M.L.E.O.T.C.) or Michigan Commission on Law Enforcement Standards (M.C.O.L.E.S.) certified police officers in Berrien, Cass, and Van Buren counties.

Research Questions

The following research questions were investigated:

1. What are the levels of police stress in a sample of police officers?

2. How is police stress related to moral reasoning and coping style in a sample of police officers?

3. Can police stress be predicted from levels of moral reasoning, coping response style, age, years of law enforcement experience, years of education, religious affiliation, frequency of religious service attendance, and the community environment in which the

officer is assigned in a sample of police officers?

Research Hypotheses

There were six research hypotheses arising out of these questions. These hypotheses are stated in the null form in chapter 3.

Research Hypothesis 1: There is a significant relationship between administrative/ organizational police stress and moral reasoning.

Research Hypothesis 2: There is a significant relationship between physical/ psychological-threats police stress and moral reasoning.

Research Hypothesis 3: There is a significant relationship between administrative/ organizational police stress and coping styles.

Research Hypothesis 4: There is a significant relationship between physical/ psychological-threats police stress and coping styles.

Research Hypothesis 5: There is a significant relationship between administrative/ organizational police stress and the following demographic variables: age, years of law enforcement experience, years of education, religious affiliation, frequency of religious service attendance, and the type of community environment in which the officer serves.

Research Hypothesis 6: There is a significant relationship between physical/ psychological-threats police stress and the following demographic variables: age, years of law enforcement experience, years of education, religious affiliation, frequency of religious service attendance, and the type of community environment in which the officer serves.

Conceptual Framework

This particular research study examined the relationship between police stress and moral reasoning, and coping response style. After examining a wealth of research literature, no conceptual models were identified that integrated these variables within one philosophical framework. Therefore, for the purposes of this study the research variables were combined into one working conceptual model.

Figure 1 depicts a proposed conceptual model of the relationship between police stress, moral reasoning, and coping mechanisms. For the most part, the model is predominately dynamic in nature. With the perception of police stress, a complex internal process involving such variables as age, ethnicity, gender, educational and religious background, years of law enforcement experience, and current stage of moral development will occur. I believe that this process will affect an officer's moral reasoning process and the type of coping mechanism selected and implemented in order to alleviate stress and restore a sense of balance.

A crucial aspect of police stress involves the individual officer's perception of the stressor. Several researchers (Britz, 1994; Graf, 1986; Kroes, 1985; Lauferweiler, 1995; Myers, 1996; Terry, 1983; Violanti, 1983; Wearing & Hart, 1996) have indicated that situational factors, such as actual law enforcement work or internal departmental conflicts, which have been appraised by individual officers as stressful, do affect their individual reactions to stress.

The perception of police stress is also strongly related to the officer's stage of career progression. Violanti (1983) believed that as officers progress through several

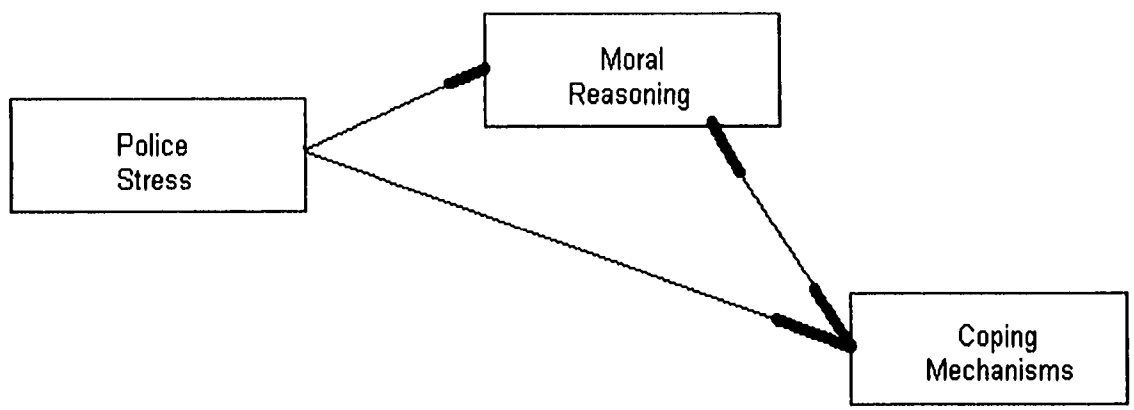

Figure 1. Conceptual framework of the relationship between police stress and moral reasoning and coping mechanisms.

transitory career stages proposed by Niederhoffer (1967), their perception of stress would change (see Table 1). Violanti's longitudinal study found that stress increased during the alarm stage and continued to increase throughout the disenchantment phase. Stress began to decrease during the personalization stage and continued to decrease in the introspection stage.

TABLE 1

NIEDERHOFFER'S (1967) HYPOTHETICAL TRANSITORY CAREER STAGES

Stage	Stress Phase	Number of Years of Law Enforcement Experience
1	Alarm	0-5
2	Disenchantment	6-13
3	Personalization	14-20
4	Introspection	20+

Violanti (1996b) and Williams (1987) have indicated that police officers are in a profession that shares similar conditions and outcomes as military combat. Several studies (Berg et al., 1994; Jackson, 1982; Wilson, 1978) have examined soldiers who had been exposed to the stressful conditions of intense combat. These studies found that post-traumatic stress is related to soldiers' level of moral development. Therefore, it is reasonable to assume that police officers who are under higher levels of stress related to

policing would exhibit differences in their levels of moral development.

Researchers have also indicated that police officers under stress will utilize a variety of coping mechanisms in order to reduce the effects of stress. In fact, several studies (Biggam, Power, & MacDonald, 1997; Hart et al., 1995; Lanagan-Fox, Deery, & van Vliet, 1997) found police officers using either a more problem-focused or emotion-focused style of coping under stressful conditions.

In sum, I believe that once a stimulus has been perceived as causing stress by an individual officer, a set of complex cognitive processes is triggered which affects moral reasoning as well as the type of coping strategy implemented. Hence, I posit that officers who are under higher levels of police stress will exhibit higher levels of moral reasoning. They would also use more problem-focused coping mechanisms than those officers with lower levels of moral development, who would tend to use more emotion-focused coping. The end result of this particular process is the reduction of stress and the restoration of a sense of balance.

Significance of the Study

Law enforcement is a profession constantly exposing police officers to the "worst plight" of the human condition. As Joseph Wambaugh once stated, "Police work is not particularly dangerous physically; but the most dangerous job in the world emotionally" (cited in Kroes, 1985). Therefore, research on police stress continues to emerge as a promising area of investigation in mental health and police psychology. The significance of this study is that this is an initial attempt to examine empirically whether or not high police stress is related to the level of moral reasoning and the adaptation of a more

emotion-focused or problem-focused coping response style. The results of this study may provide further insight and understanding on how these variables influence the officer's internal processes in order to survive the effects of stress in policing.

This study will also benefit psychologists and other mental health workers, especially those who work extensively with the law enforcement population, for the following reasons. First, it may provide them further assistance in developing treatment protocols, workshops, seminars, and psychotherapeutic services specifically designed for police officers to aid them in handling their stressors more effectively. Second, the majority of police officers are apprehensive about participating in psychological services. In the past, psychological services have often been used as a form of adverse discipline towards officers. Also, the police cultural milieu is one that continues to suggest that officers who participate in therapeutic treatment are considered "weak" or are "mentally unstable." This study may help to alleviate feelings of apprehension and mistrust toward participating in psychotherapy, as well as increase trust and empathy between police officers and psychological service providers.

Finally, this study will help to increase the development and implementation of stress prevention and psychological assessment services, as well as administrative policy changes that could assist law enforcement agencies and police administrators in the area of reducing police burnout, psychosomatic illnesses, disability claims, and maladaptive behaviors (i.e., excessive use of force, substance abuse, and suicide). These services may help to create an organizational work environment that is conducive to minimizing orchestrated-departmental stress.

Delimitations

This study is delimited to administering a demographic questionnaire, the Police Stress Survey (PSS), Defining Issues Test (DIT), and Coping Response Inventory (CRI) to only full-time police officers who are certified by either the Michigan Law Enforcement Officers Training Council (M.L.E.O.T.C.) or Michigan Commission on Law Enforcement Standards (M.C.O.L.E.S.) and who are currently or have been previously assigned to road patrol duties. Another delimitation is that the present subjects involved in this study are from law enforcement agencies only within Berrien, Cass, and Van Buren counties that reported having full-time officers in the 1997 Michigan Uniform Crime Reports. The subjects who participated in this study are only those who voluntarily sent the information back to the researcher.

Definition of Terms

The following terms are defined as they are used in this study:

Coping: The cognitive appraisals of stressful stimuli and its related behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts. These efforts serve two main functions: "the management or alteration of the person-environment relationship that is the source of stress (problem-focused coping) and the regulation of stressful-emotions (emotion-focused coping)" (Folkman & Lazarus, 1980, p. 223).

Emotion-Focused Coping: Those coping responses which control stressor-related emotions and attempt to maintain affective equilibrium through the use of emotional support, affective regulation, and emotional discharge (Billings & Moos, 1984).

Moral Reasoning: Part of an internal component process involved in judging which action would be most justifiable, in a moral sense, that leads to moral behavior (Rest, Narvaez, Bebeau, & Thomas, 1999). Kohlberg identified three levels of moral development. Each level has two types of moral judgment. The development of moral reasoning is believed to be a "gradual and continuous process" as the individual advances through a sequence of increasingly complicated moral stages.

Police Officer: A duly sworn peace officer who is trained and certified to perform all law enforcement functions.

Police Stress: The administrative/organizational and psychological/physiological-threats stressors related to police work that are perceived by the individual police officer to be disruptive to his or her psychological and physiological equilibrium. This includes his or her perceived response capabilities whenever the individual feels threatened. Under such conditions, serious consequences occur when one fails to meet these demands. These consequences usually result in negative psychological, physical, social, and behavioral effects.

Police Stressors: Those specific events, situations, or problems related to the law enforcement profession that produce stress.

Problem-Focused Coping: Those coping responses which seek to modify or eliminate the sources of stress by dealing with the reality of the situation through the use of logical analysis, instrumental support, and problem solving (Billings & Moos, 1984).

The P Score or Principled Morality (Postconventional Justifications) Score: An overall index to the level of a subject's postconventional (principled) reasoning in making

moral decisions. The P score is derived by adding the points together from the moral development stages 5A, 5B, and 6 and converting the raw stage scores to percentages by dividing the raw scores by .60 (Rest, 1986a). Thus, P% score cutoff-point indices will be: low third or "low moral development" (up to 27), middle third or "average moral development" (28-41), and high third or "high moral development" (42 and higher) (Rest, 1986a).

Organization of Chapters

This dissertation is organized into five chapters.

Chapter 1 provides the introduction, statement of the problem, purpose of the study, research questions, conceptual framework, significance of the study, delimitations of the study, and definition of terms.

Chapter 2 reviews the literature on police stress, a brief overview of moral reasoning and studies related to policing, stress and moral reasoning studies, and studies involving police and coping mechanisms.

Chapter 3 describes the methodology and type of research, which includes the population and sample selection variables, research techniques, instruments, data collection, and research hypotheses and statistical analyses.

Chapter 4 presents the analysis and interpretation of the data.

Chapter 5 gives a summary of the study, discusses the results and implications of the findings, and provides recommendations for future research.

CHAPTER II

LITERATURE REVIEW

Literature relevant for this study is reviewed in this chapter. First, police stress studies are discussed. This is followed by a brief overview of moral reasoning and related studies, stress and moral reasoning studies, and police stress and coping studies. The final section provides a summary of the literature review.

Stress and Police Officers

The occupation of law enforcement has been cited as being stressful (Kroes, 1985; Selye, 1984; Violanti, 1985). In fact, some researchers have argued, "policing is among the most stressful, if not the most stressful, of all occupations" (Terry, 1983, p. 156). However, Anson and Bloom (1988) demonstrated that police work is stressful, but no more stressful than other people-processing occupations in the criminal justice system. Furthermore, Hart et al. (1995) indicated that due to the conceptual and methodological problems in police-stress literature over the past two decades, there has been a paucity of information about the extent to which policing is stressful.

A majority of research has indicated that police stress is based on the individual police officer's perception of a particular event. In fact, Violanti (1981) suggested that officers change their perception as their service time increases. Unfortunately, the stressful events encountered by individual police officers affect them behaviorally,

psychologically, socially, emotionally, and physically.

In relation to policing, Lauferweiler (1995) defined job stress as "the psychological state of individuals which developed from the interaction of individuals and their jobs because they were faced with situations that tax or exceeded available resources--both internal and external--as appraised by the individual involved" (p. 14). Her definition suggested that the individual's perception of a stressor contributes to the development of a distressed internal state of affairs.

Another definition of stress, which has relevance for policing, comes from the research efforts of John Violanti. According to Violanti (1983), stress is a "perceived imbalance between social demands and perceived response capability; under conditions where failure to meet demands have important consequences" (p. 211).

Terry (1983) proposed two models of stress related to policing. The first view advocated that stress is the result of an organism's inability to meet and adapt to the demands of environmental events. Terry indicated that this view suggests a linear model of stress in which external stressors are the "causative agents" of individual stress. Thus, stress is the measurable amount of attractive or repulsive force existing between two objects.

The second model of stress presented by Terry (1983) argued that stress is a state of the individual. This view suggested that stress is the result of an individual's specific stress reaction to specific external stressors, hence an "ever-present 'dynamic steady state' of the individual" (Terry, 1983, p. 160). In other words, different people react differently to identical external stimuli (e.g., stress) depending on their personalities, past

experiences, and social group membership.

Terry's (1983) review of the literature indicated that the emphasis on external stressors found in discussions of police stress emanates from linear models of stress, whereas emphasis on types of individual psychological and/or personality types originates from the view of stress as a state of the individual. However, despite conceptual difficulties, the thrust of police-stress research tends to treat stress as an "objective" phenomenon, a constant component of both individual and organizational life.

A review of the contemporary literature indicated that there are specific stressors related to the profession of law enforcement. Several researchers have categorized these stressors in various ways, including the nature of police work, the criminal justice system, the public, and departmental practices (Alkus & Padesky, 1983; Bonifacio, 1991; Edworthy, 1987; Hurrell, 1986; Kroes, 1985; Symonds, 1970; Violanti & Aron, 1993, 1994).

The pioneering research of William Kroes and his associates provided the pivotal background in identifying key stressors related to policing. Kroes (1976) identified five primary stressors specific to policing: the public's negative image of the police, in the line of duty/crisis situations, the courts, having one's values assaulted by dealing with "undesirables," and racial confrontations. In 1985, Kroes published a second edition of his book in which he added several more important stressors based on his clinical experience involving the treatment of officers who had been injured or were psychologically distressed as a result of policing (Bonifacio, 1991). These stressors

included departmental pressure to further one's education (i.e., go to college), lack of promotional opportunities, performance anxiety, emotional responses to traumatic incidents, and emotional reaction to personal injury.

O'Neil (1986) indicated that, in 1980, Kroes had divided stressors related to policing into three categories. The first category included stressors that neither the police officer nor the police department has any control over, such as periods of inactivity, inadequate resources, pay and job status, work overload, court duties, level of responsibility for people, negative public image, racial situations, and crisis situations. The second category consisted of stressors that the individual officer has a moderate degree of control over, for example, job conflict, conflict of attitudes and values, and amount of part-time work. The third category classified stressors that the police administration can exert some control over, for instance, administrative policies and decisions, job ambiguity, organizational territoriality, and patterns of shift work.

A more comprehensive analysis on categorizing police stressors was conducted by Stratton (1984). Based on his analysis, Stratton identified four areas of police stressors: external stressors, internal stressors, the work itself, and personal stressors. External stressors consisted of the courts, the public's hostility, adverse government decisions, ineffective referral agencies, and ineffective communication among criminal justice agencies. Poor training, equipment, supervision and career development opportunities, an inadequate departmental system of reinforcement and rewards, offensive departmental policies and procedures, and arbitrary termination encompassed Stratton's category of internal stressors. The work itself focused on stressors such as role

conflict, shift work, danger, the absence of closure in a criminal investigation, the responsibility for the protection of others, constantly observing people in pain, and having to accept the consequences of one's actions. The fourth category, personal stressors, included incompetence, fear, being a nonconformist in the police peer group, being a female and/or ethnic minority, and personal problems, such as marital strife (Alkus & Padesky, 1983).

Although researchers have identified various stressors associated with police work, two major categories have surfaced as the most troublesome: organizational and inherent police stressors (Martelli, Waters, & Martelli, 1989; Spielberger, Westberry, Grier, & Greenfield, 1981). Events that have been precipitated by the police department administration that were considered vexing by its officers were categorized as organizational stressors, whereas inherent stressors referred to events that generally occur in policing, which have the potential to be psychologically or physically detrimental to officers. Violanti and Aron (1993) indicated that several researchers posited that organizational stressors more strongly affect officers than do inherent stressors (Brandt, 1993; Brown & Campbell, 1990; Doctor, Curtis, & Isaacs, 1994). In fact, Martelli et al. (1989) examined job satisfaction and organizational commitment involving 99 police officers and found them to be negatively related to organizational stressors. Also, research on 103 police officers conducted by Violanti and Aron (1993) indicated that police organizational stressors, mediated by job satisfaction and organizational goal orientation, increased psychological distress 6.3 times more than inherent police stressors.

Several researchers have also ranked stressors common to policing. In 1979, Spielberger et al. (1981) conducted a pilot study involving 1,300 Florida law enforcement officers during their development of the Police Stress Survey (PSS). Spielberger and his associates found 10 stress items that officers in the pilot study reported as having occurred most frequently in their own experience (see Table 2). Approximately 80% or more of the officers reported having experienced each of the situations or events listed in Table 2 (Spielberger, Grier, & Pate, 1980). Violanti and Aron's (1994) research involving the PSS with 103 police officers found that "killing someone in the line of duty" and "experiencing a fellow officer being killed" were the two top-ranked stressors. It was also found that the highest-ranked organizational stressor was "shift work," followed by "inadequate support from the department." A similar finding was reported by Boyd (1994) who examined 507 Texas police officers and found experiencing a "fellow officer killed in the line of duty" as the highest job stressor, which was followed closely by "killing someone in the line of duty."

In addition to identifying key stressors related to policing, researchers have also investigated the effects of police stress on individual officers. For instance, stress has been found to correlate with job satisfaction. Violanti and Aron (1993) found that officers who directly reported higher job satisfaction also reported significantly lower distress; however, when officers were confronted with organizational stressors, the ameliorating effect of job satisfaction was markedly reduced. They also found that inherent stressors had a similar effect on job satisfaction and distress.

TABLE 2

THE 10 MOST FREQUENTLY EXPERIENCED SOURCES OF STRESS IN POLICE WORK

Stressful Situation or Event	Percentage of Officers Reporting the Event
1. Exposure to adults in pain	96
2. Court leniency with criminals	89
3. Fellow officers not doing their jobs	87
4. Making critical on-the-spot decisions	84
5. Responding to a felony in progress	82
6. Experiencing negative attitudes towards police	82
7. Public criticism of police	82
8. Inadequate salary	80
9. Distorted or negative press accounts of the police	80
10. Personal insult from citizens	80

Note. From "The Florida Police Stress Survey," by C. D. Spielberger, K. S. Grier, and J. M. Pate, 1980, Florida Fraternal Order of Police Journal, Winter, p. 66.

In a study involving 828 police officers, Burke (1994) found less job satisfaction and greater intention to quit from officers reporting greater concerns about the way their job demands affected their health and safety. However, research relating job stress to job satisfaction was found to be inconsistent among police populations (Brown, Cooper, & Kirkcaldy, 1996; Burns, 1993) and that total job satisfaction was not significantly different from that of the general employed population norms (Blanchard, 1991;

Kirkcaldy, Cooper, & Ruffalo, 1995).

Kirkcaldy, Cooper, Shephard, and Brown (1994) examined the behavior of 533 senior police officers and found that officers who exercised regularly reported a higher level of job satisfaction and better physical and mental health than non-exercising officers. Poor mental health was found to be strongly related to stress, poor physical health, and lack of job satisfaction. Furthermore, Kirkcaldy et al. (1995) found that overall job stress was significantly negatively correlated with overall satisfaction at work and positively correlated, but not significantly, with both psychological ill-health and physical ill-health. This seemed to provide some support to an earlier study conducted by Martelli et al. (1989) who posited that officers who experienced more stress tend to be more dissatisfied overall with their jobs. They found that the relationships between the facets of job satisfaction and overall stress were all negatively related, whereas only satisfaction with salary, work, and co-workers was significantly correlated.

Research has indicated that police stress adversely affects the officer's social support systems, such as marriage and family and other social relationships. An extensive literature review by Alkus and Padesky (1983) concerning stress and police officers indicated that marital difficulties are commonly reported and that divorce rates, particularly during the first few years of police service, appear extraordinarily high. Moreover, they indicated that marital problems appear to be the most significant precipitating stress in police officer suicides, especially for younger officers.

Hageman (1978) indicated that as officers' length of service increases, they learn to cope with occupational stress through the process of detachment (becoming

emotionally uninvolved) (Bonifacio, 1991). As a result, this mechanism of detachment then becomes their coping style within their marriages. Hageman's cohort study involving 70 police officers and their spouses or future marital partners found that the wives of rookie police officers felt that their husbands rarely detached themselves from their feelings, whereas wives of veteran officers felt that their husbands often do. Furthermore, some of the officers' wives reported that marital satisfaction and happiness also decreased due to their spouse's emotional repression and felt that they receive the worst of two worlds in that they are isolated from non-police friends and emotionally isolated from the person who is "behind the shield" (Hageman, 1978).

In the realm of social support, the very nature of the law enforcement profession has led many police officers to form close-knit social systems within the police subculture (Britz, 1994; Lord, 1992; Perrott & Taylor, 1994). It has been suggested that this form of enmeshment is the result of several factors, such as being able to communicate more freely and to feel understood by peers, reduction of non-police friends, problems scheduling social events when not working, or being approached by neighbors and friends to solve problems or handle emergencies during leisure hours (Alkus & Padesky, 1983; Bonifacio, 1991; Kroes, 1985).

Graf's (1986) research involving 77 police officers indicated a moderately significant relationship between the number of supports, satisfaction with supports, and occupation stress. Graf's study suggested that police officers who identified greater numbers of support persons also perceived their occupation as less stressful. Along similar lines, Buunk and Verhoeven's (1991) research of 40 police officers revealed that:

(1) of all stressful events, interpersonal frustration correlated highest with negative affect; (2) social interactions were characterized by intimate support, rewarding companionship, and instrumental support; (3) perceived support by superiors was related more closely to features of social interaction than perceived support by colleagues, whereas in both cases the highest correlations were found with rewarding companionship; (4) individuals experiencing negative affect received relatively more support but were engaged in less rewarding companionship; and (5) the quality of their relationships at work reduced the negative affect at the end of their workday.

Anderson (1995) studied stress and its correlates among 216 police officers. He found that support from the officer's spouse, department, and social environment was strongly associated with physical health, chronic anxiety, psychological adjustment, and the perception of severity in occupational stressors. Officers who were satisfied with the support they received were more likely to report better physical health, less post-traumatic stress disorder symptomatology, lower levels of anxiety and emotional exhaustion, and less stress due to on-the-job stressors than did officers who were not satisfied with their support systems. Furthermore, research conducted by Wallet (1994) on 79 police officers indicated that role ambiguity, role boundaries, vocational stress, role insufficiency, cohesion, and adaptability were identified as those stressors and coping skills that best predict marital satisfaction.

The concept of police stress also pertains to police officer suicides. Violanti (1996) stated, "The strong socialization which occurs in police training and experience instills in officers a sense of superhuman emotional and survival strength to deal with

adversity" (p. 36). He believed that police officers who commit suicide may be attempting to restore feelings of "strength, courage, and mastery" over their environments after exposure to traumatic incidents. McCafferty, McCafferty, and McCafferty (1992, cited in Violanti, 1996a) stated:

> Stress is not always harmful; it is the individual's reaction to stress that determines whether they will adapt or become maladaptive. . . .There is constant exposure to hostility, anger, aggression, depression, and tragedy in various events and confrontations that occur daily in a police officer's life. The constant exposure to these sorts of stress requires the officer to use all of his adaptive mechanisms to cope. . . .The ultimate result in some individuals is despair, alienation, isolation, a sense of futility, hopelessness, and finally suicide. (pp. 32-33)

Furthermore, Stotland (1986) indicated that officers with high self-esteem experienced less stress (and thus less strain than officers with lower self-esteem) and were deemed more able to meet the demands of a situation.

In fact, Janik and Kravitz (1994) reviewed the records of 134 police officers who had recently undergone a fitness-for-duty evaluation based on questions regarding their ability to appropriately discharge their duties under stressful conditions. They found that 55% of the officers admitted to previous suicide attempts. Their study further indicated that officers reporting marital problems were 4.8 times more likely to have attempted suicide and 6.7 times more likely if they had been suspended.

Another important aspect concerning police stress clusters around Post-Traumatic Stress Disorder (PTSD). PTSD has occurred in military personnel involved in combat, rescue workers, survivors of natural disasters or accidents, and crime victims, and occurs as well in police officers. For instance, officers involved in police shootings may experience such post-traumatic reactions as perceptual distortion, heightened sense of

danger, anger, anxiety about future situations, flashbacks or intruding thoughts, isolation and withdrawal, emotional numbing, sleep difficulties, alienation, depression, problems with rules, regulations and authority, nightmares, family problems, "mark of Cain," substance abuse, sexual difficulties, and suicidal thoughts (Harvey-Lintz, 1994; Machell, 1993; Mann & Neece, 1990; Solomon & Horn, 1986).

What ultimately leads to the development of PTSD symptoms in police officers is "the emotionally perceived discontinuity between what the officer expects and what occurs in a traumatic event" (Mantell, 1986, p. 358). Furthermore, factors that determined the "trauma value" of the incident include: (1) if the event is typically sudden and to a large degree unexpected; (2) if the event may result in a serious threat to the officer's existence and well-being; (3) if the event may include an element of loss; and (4) if there may be an element of disruption of the officer's values or assumptions about his or her environment or those who live in it (Nielsen, 1986).

Research conducted by Williams (1987) and Violanti (1996b) indicated that military combat and police work often share similar conditions and outcomes. Interestingly, earlier research conducted by Simon (1950) on World War II veterans suggested that combat or combat-like conditions may evoke aggressive impulses (Winter, 1993) which eventually turn on the self. This seemed to support the results of a study conducted by Shalom, Benbenishty, and Solomon (1995) on 117 Israeli Defense Force mental health officers. They found that the mental health officers primarily viewed combat stress reaction as a response to external circumstances rather than resulting from personality traits or intrapsychic processes.

For law enforcement officers, being involved in a deadly force encounter (i.e., deadly force directed at the officer), having a fellow officer killed in the line of duty, viewing a child victim of a violent death, viewing a serious injury of a teenager that resulted in the teenager's death, or being constantly exposed to human misery and suffering on a daily basis have been found to be related to the development of PTSD symptoms (Higgins, 1996; Williams, 1992). Officers who cannot cope with their feelings of empathic pain, helplessness, and shame come to hate their job and themselves for what the "job" has done to them and may display many of the emotional symptoms of PTSD, such as numbing, hostility, detachment, and shame (Bonifacio, 1991). This leads to the officers' use of malignant cynicism and projection of their feelings of helplessness onto the public in an attempt to restore the feeling that they are still living up to what Bonifacio called their "ego ideal."

PTSD has also been linked to other areas in traumatized police officers. A study of 142 police officers who had experienced a traumatic event (Carlier, Lamberts, Fouwels, & Gersons, 1996) found that police officers with PTSD, as well as those with partial PTSD, exhibited significantly more dissociative symptoms than police officers without PTSD symptoms. Furthermore, Higgins (1996) indicated that personal factors such as a negative personal theory, a family history of psychological assistance, a reported emotional abuse or neglect history, and Catholicism significantly influenced the presence or severity of traumatic symptoms. A qualitative research study conducted by Van Essen (1990) indicated that female officers reported fewer traumatic reactions and that these reactions were less in severity and duration than male officers. Their husbands

were somewhat more in agreement with their wives' responses than the wives of the male officers. Male officers also reported using a wider variety of resources to help them cope with their reactions to stress than did female officers.

Several other key variables, such as shift work, age, years of education, type of community, ethnicity, and psychological burnout, have also been associated with stress in policing (Beermann & Nachreiner, 1995; Goodman, 1990; Kroes, 1985; O'Neil, 1986; Pierce & Dunham, 1992; Rodichok, 1995; Rosenbluh, 1986; Rosse, Boss, Johnson, & Crown, 1991). Although these variables are not a major focus in this particular research study, they do, however, warrant a brief review.

Researchers have found that the majority of all human physiological functions exhibit circadian rhythm cycles and that shift work, especially the social-psychological environment in which the shift work occurs, will come in conflict with these circadian rhythms (Kroes, 1985). To my knowledge, the most extensive shift pattern in policing is the 28-day or monthly (5 days on with 2 days off) shift schedule. O'Neil's (1986) literature review of shift work among police officers indicated that most officers reported physiological adaptation problems in readjusting eating and sleeping patterns as their hours of work rotated. Research by Pierce and Dunham (1992) on police officer responses to a change from a forward-rotating 8-hour shift schedule to a 12-hour compressed shift schedule indicated significant improvements in the areas of schedule-related interference with personal activities, work schedule, attitudes, general affect, stress, and fatigue. They also found that organizational effectiveness improved, but general work attitudes remained unchanged. Furthermore, research on the gender effects

of shift work conducted by Beerman and Nachreiner (1995) revealed no gender-related effects of shift work except in the area of off-duty work stress (e.g., gender-related unequal division of domestic duties differentiated between women and men, as well as the presence or absence of children).

Police stress is also affected by the officer's age, marital status, and education level. Research conducted by Spielberger et al. (1981) indicated that younger officers (ages 18-29) rated "Court Leniency," "Inadequate Salary," and "Family Demands" as more highly stressful than did older officers. Older officers rated "Lack of Recognition" as highly stressful. Mayes, Barton, and Ganster (1991) researched the moderating effects of age on stressor-strain relationships in a sample of 523 police officers, fire fighters, electricians, and managers, ages 18-63 years. They found that age moderated the relationship between various job stressors and physiological (i.e., adrenaline and health symptoms) and psychological strains (i.e., depression and life satisfaction).

Spielberger et al. (1981) also found that officers with the highest level of education (post-graduate work) rated "On-the-Spot Decision Making," "High Moral Standards," and "Excessive Paperwork" as considerably less stressful, and "Incapacitating Injury" as much more stressful than officers with either a high-school, some college, or college degree level of education. In fact, Burke (1994) found that police officers with more education reported fewer psychosomatic symptoms and negative feeling states. Regarding marital status, Spielberger et al. (1981) found that single officers rated "Physical Attack" as more stressful and "Promotion" as much less stressful, whereas separated or divorced officers rated "Lack of Recognition" as highly

stressful. Married officers rated "High Speed Chases" as more stressful and "Physical Attack" as less stressful.

Ethnicity and gender to some degree affect stress in policing. Wexler and Logan's (1983) investigation of stress among female police officers indicated that negative attitudes of male officers, training, exposure to tragedy and trouble, group blame, and rumors were their major sources of stress and that the actions of male police officers increased the stress level for women officers. In addition, Kroes (1985) stated that "the minority officer can come under a great deal of extra stress simply from the fact that he is a member of a minority" and that "prejudice against the black and Hispanic officer is very real and strong in many departments" (p. 115). In fact, a research survey of job stress among African-American police officers by Rodichok (1995) indicated that male officers reported low levels of overall job stress, while female officers reported more moderate levels of overall job stress. Specifically, both male and female officers indicated that "hassle-type" stressors, as opposed to significant life-event-type stressors, were their primary forms of job stress. Rodichok's study further indicated that issues related to departmental politics, lack of human resource development opportunities, lack of performance rewards, lack of participation in departmental decision-making, perceptions of underutilization, problems with supervision, fraternal police relations, shift work, and increasing danger on the streets were principal sources of stress among Black officers.

There also seemed to exist a relationship between police stress, years of law enforcement experience, and size and location of the law enforcement agency.

Spielberger et al. (1981) indicated that officers with 2-5 years of law enforcement experience rated "Court Leniency" and "Family Demands" as highly stressful, while officers with 6-19 years of experience rated "Family Demands" as moderately stressful. This coincided with the concept that the officer's perception of stress in policing changes as he or she progresses through several transitory career stages (Violanti, 1983). According to Violanti, stress increased during the first 5 years of an officer's career and continued to increase until the 13th year. By the 14th year stress began to decrease and continued to decline when the officer had 20 or more years of experience (Stotland, 1986). Boyd (1994) further indicated that stress was perceived at its highest levels during the 6th or 7th years of law enforcement service and did not achieve those particular heights again until the 18th or 19th year of service. Burke's (1989a) research on 522 police officers also indicated that officers with 6-15 years of experience reported experiencing greater stress, a more negative work setting, greater psychological burnout, work alienation, greater work-family conflict, and more use of sick days (Burke, 1989b).

Research on a police agency's location by Spielberger et al. (1981) indicated that the location of a department in an urban, suburban, or rural area seemed to have no effect on the stress ratings of basic-level officers. A significant difference, however, was found as a function of location. Specifically, officers who worked in rural and suburban departments rated "Insufficient Manpower" as more stressful than officers in urban departments or departments who served a combination of urban, suburban, and rural areas.

Psychological burnout has been considered a symptom of police stress, and along

with the other stresses of policing has resulted in a number of capable officers leaving the profession of law enforcement for other careers (Burke, 1994; Kroes, 1985). In fact, research on understanding work attitudes and the emotional and physical well-being of 828 police officers conducted by Burke (1994) indicated that the emotional exhaustion composite score of the Maslach Burnout Inventory was significantly related to both work attitude and emotional well-being measures. Burke and Kirchmeyer's (1990) research concerning initial career orientation, stress, and burnout among 586 police officers attending a police college indicated that officers who begin their careers with a social-activist orientation run the greatest risk of experiencing a negative work setting, heightened stress, reduced work standards, and poor emotional and physical well-being. Goodman (1990) found six significant variables in predicting burnout during an officer's career: (1) average number of sick days per year; (2) time off due to family problems; (3) number of social outlets; (4) bad court decisions; (5) number of days hospitalized; and (6) being wounded. Furthermore, Rosenbluh (1986) suggested that burnout has one basic foundation: "the severe depletion of essential chemicals due to inappropriate diet and the required dealing with highly pressurized situations" (p. 509). Rosenbluh's suggestion is very ironic, in that the nature of policing involves inconsistency--inconsistency in the nature of police work itself and maintaining a proper diet and regular exercise program.

Rosse et al. (1991) researched the role of self-esteem in the burnout process involving 335 police officers and 346 hospital employees. There was a significant negative relationship between self-esteem and burnout. Rosse et al. indicated that self-esteem served more as a precursor than as a consequence of burnout. They also found

that self-esteem does not act as a buffer to protect individuals from becoming burned out or from experiencing health disorders once they have become burned out.

Brief Overview of Moral Development

The plethora of research over the past 50 years in moral judgment has been greatly influenced by the pioneering work of Jean Piaget and Lawrence Kohlberg. Both Piaget and Kohlberg advanced the cognitive developmental approach in moral judgment research. The cognitive developmental approach incorporated two fundamental tenets. The first tenet indicated that a person's perceptions of reality are cognitively constructed (Rest, 1979). The second fundamental tenet is that there is a developmental progression in which one's earlier cognitions are elaborated to accommodate greater complexity in experience (Rest, 1979).

The 1932 research study of Jean Piaget contributed to the process of identifying the cognitive structures that underlie moral thought, revealing how these structures change over time (Rest, 1979). Piaget (1965) believed that children move through two stages of moral development: from moral realism (morality of constraint) to moral autonomy (morality of cooperation). Morality of constraint is the product of cognitive immaturity, which is egocentric and unable to take the viewpoint of others in social situations and a unilateral respect for the authority of adults. The morality of cooperation involves the underlying idea of justice and is based on a system of modifiable rules expressing common rights and obligations among equals and is essential to the intact functioning of any social unit (Johnson, 1986).

The work of Piaget inspired Lawrence Kohlberg to build further on his cognitive-

developmental theory and clinical methodology. Hence, Kohlberg (1969) developed a theory of moral judgment in which he believed that all children in every cultural setting display the invariant, sequential, and structurally complete stages of moral development that can be identified independently of the specific content of moral decisions and actions. Kohlberg's theory of moral development implies the universality of sequential stages of development under various cultural conditions.

Kohlberg's theory of moral development has been greatly criticized. In particular, critical researchers have indicated problems with the cross-cultural sequential advance in stages of moral development, gender, socialization, emotion, religion, and social and economic environment (Ji, 1995).

However, by the early 1970s there arose new trends in moral reasoning research (Rest, 1979). A major outgrowth of the work conducted by Kohlberg and Piaget was the research on the Defining Issues Test (DIT) that was developed by James Rest. According to Rest (1979), this research arose in response to the need for a practical, validated method for assessing moral judgment and the need to establish a database for the major claims of the cognitive developmental approach. Several core ideas of Kohlberg's theory have guided DIT research: (1) emphasis on rationality, (2) construction of moral epistemology, (3) development, and (4) the shift from Conventional to Postconventional thinking (Rest et al., 1999).

Rest (1979) contended that moral reasoning is a function of moral rules and principles that regulate the basic relationships among people in terms of allocating rights and allocating responsibilities; which social arrangements, practices, and institutions are

permissible in society; and what rights and responsibilities are particular to certain social roles and are common to all members of society. Rest limited his use of the term "moral" to the concepts of "justice or fairness." Therefore, the fundamental assumptions of moral judgment research are that "a person's moral judgments reflect an underlying organization of thinking and these organizations develop through a definite succession of transformations" (Rest, 1979, p. 17). Hence, a person's moral understanding develops over time, evolving from simpler ideas to more complex ideas through stage schemas.

The six stage schemes of moral reasoning, which were described by Rest (1979), are based on Kohlberg's developmental theory. Each of these stage schemas includes various sub-themes and representative characteristics. For Stage 1 (Obedience: "You do what you're told"), two of its representative characteristics described by Rest are: Right and wrong are defined simply in terms of obedience to fixed rules; and punishment inevitably follows disobedience, and anyone who is punished must have been bad. Stage 2 (Instrumental Egoism and Simple Exchange: "Let's make a deal") is characterized as: An act is right if it serves an individual's desires and interests; one should obey the law only if it is prudent to do so; and cooperative interaction is based on simple exchange. Stage 3 (Interpersonal Concordance: "Be considerate, nice and kind, and you'll get along with people") is characterized by two representative characteristics: An act is good if it is based on a prosocial motive; and being moral implies concern for the other's approval. The achievement of Stage 4 (Law and Duty to the Social Order: "Everyone in society is obligated and protected by the law") is characterized by: Right is defined by categorical rules, binding on all, that fix shared expectations, thereby providing a basis for social

order; values are derived from and subordinated to the social order and maintenance of law; and respect for delegated authority is part of one's obligations to society. Stage 5 (Societal Consensus: "You are obligated by whatever arrangements are agreed to by due process procedures") is characterized by: Moral obligation derives from the voluntary commitment of society's members to cooperate; procedures exist for selecting laws that maximize welfare as discerned in the majority will; and basic rights are preconditions to social obligations. Stage 6 (Non-arbitrary Social Cooperation: "How rational and impartial people would organize cooperation is moral") has two representative characteristics: Moral judgments are ultimately justified by principles of ideal cooperation; and individuals each have an equal claim to benefit from the governing principles of cooperation.

According to Ji (1995), Stages 4, 5, and 6 are very important in Rest's scheme because it had been determined by Lerner (1976) that in American society the majority of people primarily use Stage 4 reasoning, and because Stages 5 and 6 are characterized by "principled moral consideration." In response to objections by recent moral philosophers, Rest changed his usage of "principled" considerations to "postconventional" justifications which appeal to shareable social ideas--justifications for an act are made by arguing that the act serves shareable social goals, and that the act optimizes the welfare of all participants (Rest et al., 1999).

Recently, Rest et al. (1999) conceptualized the entire domain of moral psychology to include four major internal (psychological) component processes that lead to observable moral behaviors: Moral sensitivity, moral judgment, moral motivation, and

moral character. The first component, moral sensitivity, involves interpreting the situation, role taking on how various actions would affect the parties concerned, imagining cause-effect chains of events, and being aware that there is a moral problem when it exists. The second component, moral judgment, concerns judging which action would be most justifiable in a moral sense. Moral motivation involves the degree of commitment to taking the moral course of action, valuing moral values over other values, and taking personal responsibility for moral outcomes. The final component, moral character, involves persisting in a moral task, having courage, overcoming fatigue and temptations, and implementing subroutines that serve a moral goal.

Since the initial research studies of Piaget and Kohlberg, many researchers have replicated and expanded their work in the area of moral development. Rest (1979) indicated that in the general areas of moral judgment and cognitive developmental research, the stage model of moral development does not take into account the various factors affecting the performance of subjects making moral judgments. A complete psychological model of moral judgment needs to focus attention on specific aspects of information processing and decision-making.

Another major outgrowth of the work of Piaget and Kohlberg involved identifying and describing the basic organizational principles of social knowledge of children in early and middle childhood (Damon, 1977; Selman, 1976; Turiel, 1974). Kuczynski, Marshall, and Schell (1997) suggested that internalization (cognitive processes that take place as individuals assimilate experiences with the social environment into their knowledge structures) and externalization (the further processing

that takes place as they manifest or act on what they know) represent the individual's internal processing of values, beliefs, and other cultural products, and that parents and children do not passively upload or download information from each other. Rather they act on their interactions and communications and interpret, select, forget, and reject ideas as they process or manifest the content of their working models.

Research on the Defining Issues Test (DIT) has contributed significantly to the understanding of moral development and judgment in adults (adolescence through adulthood). More recently, Rest and his associates have adopted a more neo-Kohlbergian approach (Rest et al., 1999) in understanding moral reasoning. Rest has maintained several aspects of Kohlberg's theory while he has differed with Kohlberg in several other areas. For instance, Kohlberg advanced both a psychological theory of moral development and also a philosophical theory of normative ethics, while Rest et al. (1999) advocated that Postconventional thinking proposes a shareable ideal for society open to scrutiny and debate. Furthermore, Kohlberg described development in terms of fixed Piagetian stages, each having distinctive justice operations, while Rest et al. (1999) described development in terms of shifting distributions of schemas, the higher stages gaining in use while the lower stages diminish. Moreover, the major methodological difference between Kohlberg's approach and the DIT is that Kohlberg uses a production task (stringent verbal requirements), while the DIT uses a recognition task (which can measure tacit understanding and enables the ability to locate evidence for Postconventional thinking).

Police and Moral Reasoning

In general, the conduct and moral values of police officers, both on and off duty, have been guided by a professional set of standards or "code of ethics" (see Appendix A). In fact, Kleinig and Zhang (1993) compiled a documentary collection of professional law enforcement codes from England, Australia, Canada, and the United States. A review of these standards indicated that, overall, police officers are entrusted with special authority and responsibility to enforce laws and serve the welfare of the public through believing in the dignity and worth of every individual and the constitutional rights of each person to liberty, equality, and justice under the law. Police officers place a high value on objectivity, integrity, honesty, safeguarding the privacy of the individual, and achieving the highest standards of professional service. They are to continually strive for increased professional competence, behave in a manner that brings "credit" to the law enforcement profession at all times, and maintain high standards of conduct in interpersonal relationships. In affirmation of the existence of such ethical standards, Kooken (1957) stated, "By accepting, and living up to the code of ethics . . . the police service can soon raise itself to a high plane of professional service which will be recognized by, and meet the approbation of a most critical public" (pp. 19-20).

I could not locate any relevant studies involving the moral reasoning of police officers. However, several studies alluded to this particular topic. For instance, Bartol (1982) researched the characteristics of small-town police officers and found that problematic officers had elevated PD (paranoia) and MA (hypomania) scales on the MMPI. Bartol indicated that such elevated scores are referred to clinically as the 4-9

code which represents a tendency for the individual to have difficulty accepting society's values and standards, to have problems with authority, and to have an unusual amount of immediate family discord and conflict. He further indicated that these persons are impulsive and unable to delay gratification, show poor judgment, and demonstrate a low tolerance for frustration.

Yussen (1976) conducted a role-taking study in which he asked subjects to take the DIT as: (1) they themselves would; (2) as an average policeman would; and (3) as an average philosopher would. Yussen was interested in observing whether subjects would differentiate these moral perspectives, and if the amount of differentiation was a function of the subject's age and education. The study found no significant differences between the three social roles and the P% among 9th-grade subjects. However, a significant difference was found at the 10th-grade level between the policeman and philosopher roles. At the 12th-grade level, a significant difference was indicated between policeman and philosopher roles and between the self and philosopher roles. For the college group, Yussen found all three comparison social roles to be significant. Yussen's study suggested that older subjects show more differentiation of social roles than younger subjects.

Another study conducted by White and Manolis (1997) examined the individual differences in ethical reasoning among 258 first-year law school students. Using both qualitative and quantitative methods of analysis, the researchers demonstrated that the individual differences of gender, learning style, and world view were significantly more influential in the use of an ethic of care and justice (i.e., ethical reasoning), compared to

personality and moral orientation factors. Specifically, gender (men preferred an ethic of justice, while women preferred an ethic of care), scores on abstract and concrete learning style, and a preference for a particular world view (organicism or mechanism) were significantly more influential regarding the use of an ethic of care or justice than personality scores on thinking and feeling judgment and a preference for a particular moral orientation (communitarian or consequentialist).

It is interesting to note how White and Manolis (1997) described an ethic of care: "Society is interdependent, connected through relationships, empathetic, and responsive. Those who subscribe to a morality of care define their identity and social values via relationships with others and feel threatened by isolation" (p. 29). They also describe an ethic of justice:

> Society is composed of autonomous and independent individuals, a hierarchy of rules, rights, and obligations that provide safety from aggression or infringement of rights. Definitions of self and morality are based in individual autonomy, social responsibility, duty, obligation, and assumed reciprocity as a categorical imperative. (p. 30)

For police officers, an ethic of care and justice, combined with an ethic of justice, is believed to be a major theme of the police role that guides reasoning and behaviors in the performance of their duties.

Aardema, Luteijn, and Sanderman (1997) assessed the reliability of the Responsibility Questionnaire (RQ) which measures negative evaluations of mental events focused on beliefs concerning personal responsibility for harm to oneself and others. Although this study did not involve police officers, the study seemed to allude to the police role of being responsible for safeguarding the lives of others. Aardema et al.

indicated that subjects with more rigid thoughts and norms score higher on the RQ. The researchers suggested that if a person has higher moral standards, he/she is more likely to interpret cognitive phenomena in terms of personal responsibility for harm to self and others.

It has been suggested that the use of psychometric instruments to measure job-appropriate qualities, including values in the selection of police officer candidates, is important (Spielberger, Ward, & Spaulding, 1979). Hence, police officers should possess characteristics associated with moderate to high levels of moral reasoning. A study by Wygant and Williams (1995) examined the characteristics of people using high and moderate levels of principled reasoning as described by 102 college students. The researchers found that subjects perceived both high- and middle-principled reasoners positively in rational and intellectual terms (i.e., intelligent, logical, deliberate, calculating, academic, analytical, and rational), but negatively in interpersonal and relational terms (i.e., unfriendly, insensitive, phony, rigid, insincere, selfish, indifferent, unhappy, competitive, inconsiderate, cold, inhumane, closed, and domineering), regardless of the subject's own moral reasoning stage.

I believe the very nature of police work tends to affect what values are preferred in individual police officers and what values are preferred in others (Adlam, 1982). Wojciszke (1997) indicated that whereas individualistic values are preferred for oneself, collectivistic values are preferred in others rather than in oneself. Earlier research by Wojciszke (1994) showed that people tend to apply competence-related categories when interpreting their own behavior but moral ones when viewing a similar behavior in others.

Police officers represent a diversity of religious beliefs and backgrounds, which are believed for the most part to be the progenitor of their moral conduct and judgment. However, Ji (1995) indicated that many empirical studies comparing religious belief and moral conduct suggest that religiosity is not a crucial determinant of situational honesty, whereas other studies have correlated religious beliefs with social attitudes.

Rest (1986b) conducted an extensive literature review related to religion and moral reasoning. He found that there was a consistent relationship between the P score and religious beliefs. Conservative Christians tend to have a lower P score than liberal Christians. Furthermore, affiliation has little relation to moral judgment, and religious education displays an unclear and inconsistent relationship. Religious knowledge tends to correlate significantly with moral reasoning due to being related to cognitive ability. Thus, it would appear from Rest's literature review that adults who accept the basic doctrines of the Christian faith are less likely to achieve Kohlberg's Postconventional stages than those who do not accept the Christian faith (Ji, 1995).

Rest et al. (1999) reviewed several studies that examine the differences between Orthodox and Progressive church congregations. Orthodoxy considers moral authority in traditional, transcendent religious sources, while progressivism finds moral authority in the "spirit of the modern age," a spirit of rationalism and subjectivism. These studies suggested that, over time, the Orthodox person may become increasingly oriented to Stage 4, rejecting both developmentally lower and higher forms. The lower forms of thinking (Personal Interests) are rejected because they are seen as selfish; the higher forms (Postconventional) are rejected because one is blocked from formulating newer,

more critical ideas since logical reflection and rational scrutiny are viewed as heretical and sinful (Rest et al., 1999).

The research of Ernsberger and Manaster (1981) concluded that doctrinal differences apparently relate to strong differences in moral reasoning. Moreover, both the degree of intrinsic religious orientation and the moral stages, which are normal for one's religious community, are predictors of moral development.

Stress and Moral Reasoning

At present, I could not locate any pertinent studies that examined the relationship between police stress and moral reasoning. However, several studies have focused on the relationship between combat stress found in wartime soldiers and moral development (Card, 1987; Jackson, 1982; Schnurr, Friedman, & Rosenberg, 1993; Watson, Kucala, Manifold, Juba, & Vassar, 1988; Wilson, 1978). For instance, Schnurr et al. (1993) demonstrated a substantial positive relationship between premilitary MMPI Psychopathic Deviate scale scores and the presence of PTSD symptoms after combat exposure. Both Jackson (1982) and Wilson (1978) found low moral development test scores in several groups of combat veterans. Moreover, Watson et al.'s (1988) research on PTSD patients indicated significantly lower premilitary church attendance than community control veterans, whereas Card (1987) also indicated that church-going was associated with a reduced incidence of PTSD in Vietnam veterans.

Berg et al. (1994) identified at least three theoretical models on the relationship of combat to morality. Marin (1981) argued that combat may reduce morality. The second model hypothesized that high moral standards reduce the likelihood of participation in

combat atrocities (Card, 1987; Hendin & Hass, 1984; Schnurr et al., 1993; Watson et al., 1988). Kohlberg (1984) represented the third model and suggested that intermediate levels of morality--those that emphasize duty to society--are particularly suited for combat behavior. Berg et al. (1994) believed that Kohlberg's suggestion increased the possibility that individuals who function at either a much higher or a much lower level of moral development might have more severe emotional reactions to battlefield trauma than those in an intermediate range.

Berg et al. (1994) studied the possibility that high moral development may undermine the ability of combat experience to generate PTSD in a sample of 85 male Vietnam War veterans. Berg and his associates used several measures, including the Revised Defining Issues Test developed by Rest (1979). Based on their findings, Berg et al. suggested that high moral development increases the severity of PTSD symptoms from exposure to mild/moderate combat; however, higher levels of combat do not appear to increase stress disorder severity. Specifically, subjects with high moral development tended to develop moderate PTSD reaction after combat regardless of its severity. In subjects with lower moral development, severity of PTSD was highly dependent on combat intensity.

The nature and atmosphere of police work share similar conditions and outcomes as military combat (Violanti, 1996b; Williams, 1987). Both soldiers and police officers experience events and circumstances in their work that significantly increase psychological trauma (Violanti, 1996a). In fact, Williams (1987, p. 267, cited in Violanti, 1996a) indicated that police officers are engaged in "peacetime combat":

> For cops, the war never ends. . . .They are out there 24 hours a day, 7 days a week to protect and serve, to fight the criminal--our peacetime enemy. The police officer is expected to be combat-ready at all times while remaining normal and socially adaptive when away from the job. The psychological toll for many is great, unexpected, and not well understood. (p. 38)

Police officers have been known to experience similar conditions to Vietnam veterans (Violanti, 1996b). Violanti indicated that these conditions included: (1) an unknown enemy, (2) a continued sense of insecurity, (3) lack of public support, (4) witnessing abusive violence, and (5) depersonalization.

Brown and Grover (1998) examined exposure to operational stress and the possible moderating role played by just-world beliefs (the individual's belief in a just world, which is said to enhance feelings of security to the extent that if an individual satisfies conditions of being good then he or she is protected from injustice), availability of social support, and negative attitudes toward emotional expression among 594 police officers. The researchers found that under conditions of high stressor exposure, social support appears more important in its potentially moderating role then just-world beliefs, which seem more of a hindrance than a help. Brown and Grover (1998) further indicated that as long as stressor exposure is low and confirms ideas that the world is controllable, it seems to buffer police officers in terms of their psychological distress. However, when exposure to stress is high and the officer's assumptive world is challenged, then the protective buffer offered by just-world beliefs seems to be compromised. Brown and Grover (1998) concluded that both low and high stressor exposure where individual police officers lack social support, high negative attitudes towards emotional expression, and low just-world beliefs are conditions associated with the highest levels of

psychological distress experienced by police officers.

Stress and Coping Among Police Officers

The underlying assumption for the use of coping styles by police officers in this research study comes from the cognitive-phenomenological theory of psychological stress developed by Richard Lazarus and his colleagues (Folkman & Lazarus, 1980; Folkman, Schaefer, & Lazarus, 1979; Lazarus, 1966, 1981; Lazarus & Folkman, 1984; Lazarus, Kanner, & Folkman, 1980; Lazarus & Launier, 1978). According to Lazarus and his colleagues, the entire theoretical framework of the cognitive-phenomenological theory of psychological stress is transactional in nature. Hence, the person and the environment are seen in a continuous relationship of reciprocal action, each affecting and in turn being affected by the other (Folkman & Lazarus, 1980).

Two processes defined by Lazarus as appraisal and coping, mediate this relationship. Folkman and Lazarus (1980) indicated that

> appraisal is the cognitive process through which an event is evaluated with respect to what is at stake (primary appraisal) and what coping resources and options are available (secondary appraisal). There are three major types of stressful appraisals: harm-loss, which refers to damage that has already occurred; threat, which refers to harm or loss that has not yet occurred but is anticipated; and challenge, which refers to an anticipated opportunity for mastery or gain. The degree to which a person experiences psychological stress, that is, feels harmed, threatened, or challenged, is determined by the relationship between the person and the environment in that specific encounter as it is defined both by the evaluation of what is at stake and the evaluation of coping resources and options. (p. 223)

Lazarus defined coping as the cognitive and behavioral efforts made to master, tolerate, or reduce external and internal demands and conflicts among them (Folkman & Lazarus, 1980). Two primary functions served the coping efforts: the alteration or

management of the person-environment relationship that is the source of stress (problem-focused coping) and the regulation of stressful emotions (emotion-focused coping). Folkman and Lazarus (1980) indicated that coping efforts are made in response to stress appraisals; however, appraisal and coping continuously influence each other throughout an encounter.

Lazarus and his colleagues also viewed coping as a process (Burke, 1994). The coping process is defined by Folkman and Lazarus (1980) as

> what a person actually thinks and does in a particular encounter and to changes in these efforts as the encounter unfolds during a single episode or across episodes that are in some sense part of a common stressful encounter, as in bereavement. (p. 224)

Researchers over the past 30 years have found that police officers often employ a variety of coping mechanisms in order to reduce the effects of stress and anxiety related to police work. Alkus and Padesky (1983) indicated that failure to reduce or relieve stress-related anxiety leads to cognitive and emotional conflicts such as feelings of guilt, suspiciousness, and depression, which are often exhibited through low motivation, disappointment/disillusionment with the job, sleeplessness, weight loss and reduction in productivity, anger (which is often displaced), and reaction formation which can be manifested in a defensive facade of overconfidence, aggression, and/or risk-taking behaviors.

The most common coping strategies used by police officers include cynicism (Andersson, 1996; Bonifacio, 1991; Kroes, 1985; Kubany, Gino, Denny, & Torigoe, 1994; Niederhoffer, 1967; Violanti & Marshall, 1983), violence and deviant behaviors (Baker & Carter, 1994; Toch, 1996; Winter, 1993; Worden, 1996), depersonalization

(Bonifacio, 1991; Violanti, 1981), suspiciousness or hypervigilance (Gilmartin, 1986; Kroes, 1985), increased risk-taking behaviors (Alkus & Padesky, 1983), suicide (Allen, 1986; Beehr, Johnson, & Nieva, 1995; Nierenberg, Ghaemi, Clancy-Colecchi, Rosenbaum, & Fava, 1996; Violanti, 1996), and substance use and abuse (Beehr et al., 1995; Carter & Stephens, 1994; Pendergrass & Ostrove, 1986; Violanti, Marshall, & Howe, 1985). Other coping strategies used by police officers to help reduce anxiety and stress included overeating, gambling, and the use of tobacco and tranquilizers (Alkus & Padesky, 1983).

Next to cynicism, alcohol use is the most prevalent type of coping mechanism used among police populations and it continues to be a serious problem (Alkus & Padesky, 1983; Bonifacio, 1991; Dietrich & Smith, 1986; Kroes, 1976; Lehrfeld, 1989; Machell, 1993; Wolford, 1993). For instance, Kroes (1976) estimated that 25% of all police officers have a serious alcohol dependence problem. According to Violanti et al. (1985), police officers usually drink together to avoid public criticism. Furthermore, they reported that stress has the greatest impact on alcohol use among police officers. Violanti's group stated that "its effect was close to 20 times as great as emotional dissonance or cynicism" (p. 109). In the same study, they also found that "emotional dissonance" (which arises from depersonalization during the police work experience) and "depersonalization" (a learned behavior to objectify the police officer's emotions when faced with unpleasant work situations) indirectly contributed to a substantial increase in alcohol use due to stress. In addition, alcohol usage and stress increased when the police officer's use of "cynicism" (a learned behavior to psychologically modify the effects of

police-work demands through disbelief) to cope with stress failed (Violanti et al., 1985).

Burke (1994) examined stressful events and coping among 828 police officers. Burke found that police officers who used alcohol and drugs as coping responses also reported more psychosomatic symptoms, smoked more cigarettes, consumed more alcohol, and used more medications. Interestingly enough, police officers who were more likely to withdraw and isolate themselves also reported more psychosomatic symptoms and negative feeling states and greater use of medication, whereas officers who undertook more physical exercise indicated fewer psychosomatic symptoms and smoked fewer cigarettes.

Police officers are often exposed to cognitive and behavioral stressors, such as victims of domestic assaults, fatal vehicle accidents, serious injury or criminal incidents involving children, and police shootings, which result in the use of certain coping styles. Holaday, Warren-Miller, Smith, and Yost (1995) found that in order to work through their emotional distress during crises, some officers relied on spiritual beliefs; however, most reported concentrating on the task they were performing. Moreover, police officers were found to rely on informal debriefing (i.e., talking to each other) rather than formal debriefings with professionals.

Police Stress and Emotion-Focused and Problem-Focused Coping

The research of Folkman and Lazarus (1980) provided the pivotal background in understanding how people cope with stressful events by using either problem-focused or emotion-focused coping. Problem-focused coping involves the "management or alteration of the person-environment relationship that is the source of stress" and includes

such strategies as seeking information, trying to get help, inhibiting action, and taking direct action. Emotion-focused coping involves the "regulation of stressful emotions" and employs such strategies as trying to see humor in the situation, avoidance, detachment, assignment of blame to self or others, fatalism, projection, and fantasy.

Folkman and Lazarus (1980) analyzed how 100 middle-age community-residing men and women coped with the stressful events of daily living. They found that both emotion-focused and problem-focused coping were used in 98% of the 1,332 episodes, indicating that people are more variable than consistent in their coping patterns. They further found that problem-focused coping was used more in work-related contexts, whereas emotion-focused coping was used in more health-related contexts. Situations in which the person thinks something constructive can be done or are appraised as requiring more information favor problem-focused coping. In contrast, persons who feel that they must accept situations as they are favor emotion-focused coping. The researchers found no effects associated with age; however, differences were found to be associated with gender in relation to problem-focused coping. Men were found to use more problem-focused coping than women at work and in situations concerning acceptance and requiring more information.

Billings and Moos (1984) classified coping responses within three general domains. The first domain, appraisal-focused coping, involves efforts to define and redefine the personal meaning of a situation. The second domain, problem-focused coping, concerns the responses that seek to modify or eliminate the source of stress by dealing with the reality of the situation. The third domain, emotion-focused coping,

involves the responses that control stress-related emotions and attempt to maintain affective equilibrium. Billings and Moos also indicated that sociodemographic factors, such as education and socioeconomic status, may be related to coping responses. For example, in comparison with persons with less education, persons with more education may develop higher levels of cognitive complexity that form more realistic appraisal processes and active problem solving (Menaghan, 1983).

Billing and Moos (1984) examined a stress and coping paradigm to develop indices of coping response and to explore the roles of stress, social resources, and coping among 424 men and women entering treatment for depression. They found that chronic strains were somewhat more strongly and consistently related to the severity of dysfunction. Moreover, Billing and Moos indicated that coping responses directed toward problem solving and affective regulation were associated with less severe dysfunction, whereas emotion-discharge responses were linked to greater dysfunction. The researchers also indicated that women more frequently used emotion-focused coping.

Two studies conducted by McCrae (1982, 1984) assessed the influence of losses, threats, and challenges on the choice of coping mechanisms. The first study involved 255 subjects, while the second study used 151 subjects. McCrae found across both studies that the type of stressor had a consistent and significant effect on the choice of coping mechanisms employed. Specifically, subjects who had experienced loss especially used faith, fatalism, and expression of feelings; subjects facing threat used wishful thinking, faith, and fatalism. McCrae further indicated that a number of mechanisms were used more under conditions of challenge, including rational action, perseverance, positive

thinking, intellectual denial, restraint, self-adaptation, drawing strength from adversity, and humor.

Based on the earlier research of Billings and Moos (1984), Hart (1988) developed the Coping Response Inventory (CRI) to assess the coping strategies used by police officers. The CRI is a 24-item instrument designed to measure the extent to which police officers use various coping strategies (emotion-focused or problem-focused coping) to manage or deal with a specific work event that had caused them stress. Hart found that police officers reported using similar strategies to cope with stressful events in the work and non-work domains of their lives. He also found that the CRI seems to assess the typical style in which police officers attempt to cope with their daily lives.

Hart et al. (1995) examined police stress and well-being involving 527 police officers. Hart and his colleagues found that the negative affectivity path was strongly influenced by neuroticism, which directly affected the use of emotion-focused coping. Furthermore, the use of emotion-focused coping resulted in greater police hassles, which in turn contributed to higher levels of psychological stress. The positive affectivity path was influenced by extraversion, although not to the same extent that neuroticism influenced the negativity path. Hart et al. (1995) also found that extraversion directly affected the use of problem-focused coping. He indicated that the use of problem-focused coping contributed to increased police uplifts, which in turn contributed to higher levels of well-being. Moreover, the Hart et al. study indicated that if police officers use one form of coping, they are also likely to use the other.

A later research study conducted by Wearing and Hart (1996) involving 330

police officers examined the nature and degree of the relationship between coping strategies, personality, situational appraisals, and the extent to which these relationships are domain-dependent. In support of the Hart et al. (1995) study, Wearing and Hart (1996) found that personality characteristics, coping strategies, and situational experiences function as discrete subsystems. Furthermore, neuroticism, emotion-focused coping, and daily hassles correlated with one another, whereas extraversion, problem-focused coping, and daily uplifts correlated with each other.

Stress-coping strategies involving 271 police officers were studied by Evans, Coman, Stanley, and Burrows (1993). Evans and his colleges demonstrated that police officers used problem-focused, direct-action coping strategies, with more limited use of social supports, self-blame, and wishful thinking. These subjects also reported more Type A behavior patterns such as strategies for making action plans and following them, working through situations one step at a time, and standing their ground and fighting for what they wanted. However, Evans et al. suggested that many of the officers in their study may not deal effectively with their emotion-focused concerns.

Biggam et al. (1997) studied the employed coping skills of 699 police officers in order to deal with the stressors of routine police work. The researchers found, overall, a preference for more problem-focused, direct-action coping strategies. Specifically, officers demonstrated a preference for balancing the demands of work and home as a means of coping with self-perceived stressors of routine police work. Moreover, male officers scored higher on the use of logic as a coping strategy, while female officers scored higher on the social support strategies of coping. They also found that younger

officers scored the highest with regard to the use of social support as a way of coping, while sergeants scored the highest on the use of task (work reorganization and reliance on organizational processes) strategies.

The relationship between coping behavior and personality disposition (need for power) based on a police officer trainee's environment and appraisal of the situation was examined by Lanagan-Fox et al. (1997). Lanagan-Fox et al. demonstrated that coping is a complex process that can involve the simultaneous use of several strategies. The researchers further indicated that problem-focused coping strategies were used more often, although emotion-focused and problem-focused forms of coping were generally used together. Moreover, Lanagan-Fox et al. (1997) found that, as a group, the police trainees in their study were high in motivation for power (nPower). Trainees who were highly power-motivated tended to employ problem-focused methods of coping to a greater extent than emotion-focused coping as compared with low-power-motivated trainees.

Summary of Literature Review

The present literature supports the concept that police officers are exposed to various stressors within police work. Police stress can also be associated with the individual officer's perception of a particular stressor, depending on the officer's length of service within law enforcement. Numerous police-related stressors in general have been categorized as either organizational (administrative) or inherent (events generally occurring in policing which have the potential to be psychological or physically detrimental) stressors. Stressors that are classified as organizational increase

psychological distress more than inherent police stressors.

Research supports the concept that sources of police stress can affect job satisfaction, physical and mental well-being, marriage, family, other social relationships, coping, and job performance. Also, shift work, age, years of education, types of community, gender, ethnicity, and psychological burnout have been linked to stress within police work.

The nature of police work has been found to share similar outcomes and conditions characteristic of military combat. As such, research has indicated that police officers can develop PTSD symptoms. One research study suggested that the development of PTSD symptoms in police officers is the result of emotionally perceived discontinuity between the officers' expectations about a traumatic event and what actually occurs.

Research involving moral development has contributed to identifying cognitive structures that underlie moral thought and development. Moral values and ethics are an important guide for the behaviors of police officers, both on and off duty. Presently, no specific research studies examined the relationship between police stress and moral reasoning. However, research does suggest that police work and military combat have similar conditions. Several studies indicated that combat veterans exhibit low moral development test scores. Another study suggested that high moral development in soldiers exposed to mild-moderate levels of combat increases the severity of PTSD symptoms, while the severity of PTSD in soldiers with lower moral development depended highly on the intensity of combat.

Police officers represent a diversity of religious backgrounds and beliefs that can influence moral judgment and behavior. Research suggests that the effects of religiosity can range from not being a crucial determinant of social honesty to the display of increased intolerance of other ethnic and racial groups by religious individuals. The literature also suggests that there is a consistent relationship between P scores and religious beliefs and that religious knowledge tends to correlate significantly with moral reasoning.

Finally, the literature suggests that coping is a process and that police officers often employ a variety of coping strategies in order to reduce the effects of stress and anxiety related to policing. Failure to reduce stress can lead to cognitive and emotional conflicts, as well as self-destructive behaviors. Common forms of coping among police officers include cynicism, depersonalization, detachment, suicide, risk-taking behaviors, and substance abuse. For police officers, the literature suggests that situational stress is associated with the use of either problem-focused or emotion-focused ways of coping. Research indicated that, overall, police officers tend to use more problem-focused, direct-action coping strategies, although both emotion-focused and problem-focused forms of coping are generally used together.

The present study's review of literature provides findings found in various studies related to police stress, but this study examined how police stress is related to moral reasoning, coping, and several other demographic variables. There is no research on a conceptual model that explores the association between police stress and moral reasoning and coping.

CHAPTER III

METHODOLOGY

Type of Research

This was a correlational study using a survey research method. The purpose of the design was to investigate the extent of the relationship between police stress and moral reasoning, coping mechanisms, and selected demographic variables among a sample of police officers within the Tri-County (Berrien, Cass, and Van Buren counties) area, using the Police Stress Survey (PSS), Defining Issues Test (DIT), Coping Response Inventory (CRI), and a Demographic Questionnaire.

Population

The population for this study was comprised of only sworn full-time police officers certified by the Michigan Law Enforcement Officers Training Council (M.L.E.O.T.C.) or Michigan Commission on Law Enforcement Standards (M.C.O.L.E.S.) who were currently assigned to or have had previous patrol experience. These officers were selected from 41 law enforcement agencies (i.e., Michigan State Police, County Sheriff Departments, Cities, Villages, and Townships) within Berrien (22 agencies), Cass (6 agencies), and Van Buren (13 agencies) counties that reported employing sworn full-time officers (N = 488) listed in the 1997 Michigan Uniform Crime Report. Each subject from this population (N = 488) was sent a packet containing the

research materials to complete and return. The population for this study came from various cultural, educational, and law enforcement experience backgrounds.

Sworn part-time M.L.E.O.T.C. or M.C.O.L.E.S. certified police officers were not included in this study, since many of these officers work as full-time police officers at another law enforcement agency. This procedure of excluding part-time officers was necessary to ensure that the research materials were not completed twice by the same officer. Also, depending on a law enforcement agency's policy and/or union stipulations on the use of part-time officers, many of these officers work schedules that are often sporadic and inconsistent. For example, one part-time officer may work only 2 days a month for 14 hours while another may work the entire month for 32 hours each week.

Procedure

This research study involved the voluntary participation of human subjects. Therefore, I obtained permission from the Andrews University Human Subjects Review Board to proceed with the study prior to initiating the data collection segment.

During the week of July 11, 1999, the researcher contacted the Chief of Police, Sheriffs, and Post Commanders of involved Michigan State Police posts for each law enforcement agency by letter (see Appendix B), telephone, and E-mail (if available) in order to: (1) inform them of the purpose of the research study, (2) obtain permission to distribute the research materials to its complement of police officers, (3) obtain an accurate number of officers employed with that particular agency, and (4) answer any questions they might have regarding the study. In fact, I was given permission by my Chief of Police to allow the Department's administrative assistant to contact each of the

law enforcement agencies selected to participate in this study to obtain an accurate number of full-time sworn police officers employed at each agency. After contacting each of the 41 law enforcement agencies within the Tri-County area, my department's administrative secretary indicated that the resulting total of M.L.E.O.T.C. or M.C.O.L.E.S. certified full-time police officers was 488.

Once permission was granted, a large envelope for each police officer containing a cover letter, the research materials (Demographic Questionnaire, PSS, DIT, and CRI), and a stamped self-addressed return envelope was delivered to each law enforcement agency and distributed to each officer's individual mailbox during the week of July 18, 1999. The packet included a pack of Starburst fruit chew candy as an incentive/gift for their participation in the study. Envelopes for each packet were numbered in order to correspond them to the law enforcement agency to which they were distributed. This allowed the researcher to monitor which agency's officers were returning the research materials. The subjects were asked to complete and mail back the research materials in the provided envelope within 4 weeks. A follow-up letter to encourage those who had not completed and returned the research materials was sent to each agency to distribute to each officer after 2 weeks (week of July 30, 1999).

Subjects were informed through a cover letter (see Appendix B) of the purpose of the study, that their participation in the study was voluntary, and that the questionnaire and test materials were strictly for research purposes. They were also told that all information provided would be kept confidential and would not be released to their department's administration. Subjects were instructed not to make any identifying marks

on the questionnaire, test materials, or on the envelope that was to be returned to the researcher for the purpose of protecting anonymity. Subjects were advised that it would take approximately 60 minutes to complete all of the research materials. Furthermore, subjects were advised that the research materials could be completed all at once or within several sittings, whichever was convenient for the officer. Each subject was asked to read the instructions carefully and to be as honest as possible in responding to the test items. They were also asked to double-check their answered research materials to ensure that all items had been answered. Upon completion of their research materials, participants were asked to place them in the provided stamped, self-addressed return envelope. The return envelope was addressed to the researcher at the Buchanan Police Department. The subjects were advised that the enclosed gift was in appreciation for their participation in the study. All subjects were told that a copy of an abstract report of the research results would be provided to their department to post for their review.

During the week of August 1, 1999, a personal phone call was made to and a letter was sent to each Police Chief, Post Commander, and Sheriff within the Tri-County area in order to encourage those officers who wished to participate in the study, but had not returned their completed questionnaires, to do so. I also sent a personal reminder to each officer within Berrien County who had designated E-mail service through the county's Wiz-mail system. It was emphasized that in the follow-up letter that participation in this research study was voluntary; that the information that they submitted would be kept confidential; that the candy gift was theirs to keep, whether or not they decided to participate; and that the deadline to return their completed

questionnaires in the provided self-addressed envelope had been extended to the last week of August 1999.

Once the data were collected, I checked them for completeness. The scores were computed, and the results and demographic information were entered into the computer for statistical analysis.

Instrumentation

The police officers were asked to complete the following information: (1) a demographic questionnaire, (2) the Police Stress Survey, (3) the Defining Issues Test, and (4) the Coping Response Inventory.

Demographic Questionnaire

A questionnaire to collect demographic information about each police officer was developed (see Appendix C). Respondents were asked to indicate personal information regarding gender, ethnicity, years of law enforcement experience, education level, type of law enforcement agency, present work assignment, type of community mostly served, current rank/job title, shift hours and rotation schedule, marital status, age, religious affiliation, and frequency of church participation. The demographic questionnaire took less than 5 minutes to complete.

Police Stress Survey

This particular instrument was used for collecting the police stress data in this study (see Appendix C). Charles Spielberger, Lynne Westberry, Kenneth Grier, and Gloria Greenfield developed the instrument in 1981. The PSS was a paper-and-pencil

questionnaire that consisted of 60 items. The instrument could be either hand or computer scored and took approximately 15-20 minutes to complete.

According to Spielberger et al. (1981), the general goal of the PSS was to identify and assess job-related events and situations that are considered stressful by law enforcement officers. The PSS contains two subscales to measure sources of stress related to policing: (1) Administrative/Organizational Pressure and (2) Physical/ Psychological Threats. The administrative/organizational pressure subscale consists of 33 items (1, 4-7, 12-14, 17, 22-24, 27, 29, 30, 32-38, 40-42, 45, 47, 48, 51-53, 55, and 60), while the physical/psychological threats subscale consists of 23 items (8, 10, 11, 16, 18-21, 25, 26, 28, 31, 39, 43, 44, 46, 49, 50, 54, and 56-59). Items 2, 3, 9, and 15 were filler items.

Participants were asked to rate their perceived stress for each of the 60 items on a scale of 0 to 100. The first item of the instrument, "Assignment of disagreeable duties," was given an arbitrary rating of 50. Participants were instructed to compare each event with the stress produced by being assigned disagreeable duties. For those events that were to be either more stressful or less stressful than the standard, participants were asked to rate that item proportionately higher than or lower than 50.

The PSS was slightly modified by the researcher with permission from the instrument's author in order to simplify the rating procedure for participants. Specifically, a Likert-type scale ranging from 1 to 5 was placed next to each item in order for subjects to circle their responses. Hence, a rating of 5 was high stress, a rating of 4 was high-moderate stress, a rating of 3 was moderate stress, a rating of 2 was low-

moderate stress, and a rating of 1 was low stress. Participants were instructed to rate the amount of stress for each item according to the scale based on their personal experience of each event.

The second portion of the instrument instructed participants to approximate the frequency of each event that they had personally experienced within the past month and during the past year. Spielberger et al. (1981) reported, however, that the frequency ratings obtained with the original survey form were judged unreliable and, as such, were not reported in the manual. Since the frequency section of the PSS had no bearing on the overall test reliability of the instrument, this portion of the instrument was excluded from the research study.

The pilot study of the PSS was conducted on 45 officers associated with several Fraternal Order of Police Lodges that geographically represented the State of Florida. Spielberger et al. (1981) indicated that the pilot-study mean stress ratings for acceptable instrument items ranged from 86.1 ("Fellow officer killed in the line of duty) to 38.4 ("Performing non-police tasks"), demonstrating that the stressor events canvassed a wide range of stress intensity. Furthermore, the large values of the standard deviations for the individual items of the instrument indicated that the perceptions of the amount of stress associated with each stressor event varied among the officers participating in the pilot study.

After completing the pilot study, the PSS was mailed out to 1,350 police officers throughout the State of Florida. The data from a total of 210 completed surveys were used in comparison with the data obtained from the pilot study. In both the mail survey

and pilot study the same three stressor events received the highest stress ratings: (1) Fellow officer killed in the line of duty (89.3); (2) Killing someone in the line of duty (86.9); and (3) Exposure to battered or dead children (79.3). Spielberger et al. (1981) further indicated that 9 of the 10 items rated as the most stressful in the pilot study were also rated as the most stressful in the mail survey, and 7 of the 8 items rated the least stressful in the pilot study were also given the lowest stress ratings in the mail survey (see Table 3).

Factor structure

A latent roots, Cattell's scree test, and Varimax rotation indicated that either two or three factor solutions could be extracted (see Table 4). The two-factor solution, which Spielberger et al. considered "more parsimonious," produced the following factors: (1) Administrative and Organizational Pressure and (2) Physical and Psychological Threats.

The PSS indicated that there was a significant difference between the mean stress ratings of the officers' rank and three stressor events. Basic Level Officers regarded "Personal insults from citizens" as more stressful than higher ranking officers (i.e., Sergeants, Detectives, and Lieutenants and above). "Lack of recognition for good work" was considered more stressful by Basic Level Officers and Sergeants than Detectives and Lieutenants. Sergeants provided a higher stress rating to "lack of participation in decision making" than the other groups.

The PSS examined the effects of age, education, and marital status on stress ratings and found significant differences among these variables. Younger officers (ages 18-29) rated "court leniency" as more stressful than older officers (i.e., ages 30-39 and

TABLE 3

PSS ITEM MEANS AND STANDARD DEVIATIONS FOR THE MAIL SURVEY AND PILOT STUDY

Item	Mail Survey (N = 210)		Pilot Study (N = 45)		
	Mean	SD	Mean	SD	Rank
1. Fellow officer killed in the line of duty	89.3	15.2	86.1	17.3	1
2. Killing someone in the line of duty	86.9	19.6	81.5	23.0	2
3. Exposure to battered or dead children	79.3	20.1	78.9	16.6	3
8. Confrontations with aggressive crowds	70.0	23.7	75.8	16.0	4
4. Physical attack on one's person	74.5	25.2	74.5	20.5	5
5. Situations requiring use of force	71.2	24.9	70.9	16.5	6
6. Inadequate salary	70.2	25.1	69.2	19.8	7
14. Responding to a felony in progress	64.9	24.9	68.9	17.6	8
10. Inadequate support by supervisor	66.4	23.1	68.0	20.0	9
7. Inadequate support by department	70.1	24.2	67.7	18.0	10
50. Delivering a death notification	48.6	27.8	45.4	26.4	53
59. Strained relationships with non-police friends	39.6	23.7	45.2	27.3	54
58. Promotion or commendation	40.7	27.4	44.4	29.8	55
54. Exposure to adults in pain	42.9	24.0	42.9	22.4	56
60. Minor physical injury on the job	38.6	24.5	41.4	24.3	57
53. Demands for high moral standards	43.0	26.4	40.8	25.3	58
57. Periods of inactivity or boredom	41.4	24.7	39.0	22.5	59
60. Performing non-police tasks	42.0	26.0	38.4	22.5	60

Note. From The Police Stress Survey: Sources of Stress in Law Enforcement (pp. 18-19), by C. D. Spielberger, L. G. Westberry, K. D. Grier, and G. Greenfield, 1981, Tampa, FL: Human Resource Institute.

TABLE 4

FACTOR LOADINGS OF THE PSS

Survey Items	Administrative/ Organizational Pressure	Physical/Psychological Threats
48. Court decisions restricting police	.79	
1. Assignment of disagreeable duties	.78	
33. Lack of recognition for good work	.73	
24. Disagreeable departmental regulations	.71	
41. Lack of participation in decisions	.68	
34. Excessive, inappropriate discipline	.68	
30. Ineffectiveness of correctional system	.68	
7. Pressure from outside department	.67	
29. Ineffectiveness of judicial system	.66	
27. Distorted, negative press accounts	.65	.32
12. Inadequate support by supervisor	.64	
6. Pressure from within department	.64	
23. Public criticism of police	.64	
13. Inadequate support by department	.63	
35. Performing non-police tasks	.62	
45. Demands for high moral standards	.59	
5. Court leniency with criminals	.58	
36. Demands made by family	.58	
38. Inadequate, poor-quality equipment	.57	
53. Poor or inadequate supervision	.57	
55. Plea bargaining	.55	
42. Inadequate salary	.53	
51. Public apathy toward police	.52	
47. Job conflict	.52	.40
32. Insufficient manpower	.52	.37
22. Negative attitudes toward police	.51	.31
14. Court appearances on day off	.51	
17. Periods of inactivity or boredom	.48	
40. Racial pressure or conflicts	.48	.44
52. Competition for advancement	.46	
60. Excessive paperwork	.41	
37. Promotion or commendation	.39	
4. Fellow officers not doing job	.39	
9. Working a second job		
21. Responding to a felony in progress		.83
19. High-speed chases		.80
18. Dealing with crisis		.79
44. Physical attack on one's person		.76
46. Situations requiring force		.76
50. Making arrests while alone		.76
28. Making critical decisions		.70
25. Confrontation with aggressive crowd	.38	.69

Table 4 – Continued.

26. Fellow officer killed		.67
16. Delivering death notification		.63
59. Mistreatment of police by court	.42	.60
49. Killing someone		.58
31. Personal insult from citizen	.36	.58
57. Exposure to adults in pain		.56
54. Exposure to battered or dead children		.55
58. Minor physical injury		.53
11. Exposure to death of citizen		.52
39. Increased responsibility	.36	.51
43. Accident in patrol car	.35	.50
56. Changes from boring to demanding jobs		.49
20. Difficulty getting along with supervisor	.32	.48
10. Strained relationships		.46
8. Incapacitating physical injury		.43
15. Assignment of incompatible partner		

Note. From The Police Stress Survey: Sources of Stress in Law Enforcement, (p. 30), by C. D. Spielberger, L. G. Westberry, K. D. Grier, and G. Greenfield, 1981, Tampa, FL: Human Resource Institute.

40+ years). "Inadequate salary" was regarded as being extremely stressful by younger officers and they considered "Family demands" highly stressful; however, this stressor declined with age. Older officers regarded "Lack of recognition" as highly stressful while younger officers regarded this item as moderately stressful.

Officers who were at the highest level of education (post-graduate work) regarded "On-the-spot decision making," "High moral standards," and "Excessive paperwork" as less stressful, and "Incapacitating injury" as more stressful than officers in the other three educational groups (i.e., High School, Some College, and College Degree). Officers with college degrees regarded "Incompatible partner" as less stressful than the other two educational groups.

Single officers considered "Physical attack" as more stressful and "Promotion" as less stressful than officers who were either married or divorced/separated. "Lack of recognition" was rated highly stressful by separated or divorced officers, whereas single and married officers rated this item as moderately stressful. Married officers considered "High speed chase" as more stressful and "Physical attack" as less stressful than the other marital groups.

The PSS examined the relationship between stress ratings and years of law enforcement experience and size and location of the employing agency. Officers with 2 to 5 years of experience regarded "Court leniency" as highly stressful. The event stressor, "Family demands," was rated highly stressful by officers with the least experience, moderately stressful by officers with 6 to 19 years of experience, and the least stressful by officers with more than 20 years of experience.

As far as department size, officers in small departments (0 - 50 sworn officers) regarded "Felony responses" and "Minor physical injury" as more stressful than officers from medium size (51 - 400 sworn officers) or large departments (400+ sworn officers). Officers in medium-size departments rated "Job conflict" and "Inactivity and boredom" as more stressful than the other two department sizes. Furthermore, officers who worked in rural and suburban departments rated "Insufficient manpower" as more stressful than officers in urban departments or departments that served a combination of urban, suburban, and rural areas.

Reliability

Reliability data were not provided within the PSS manual. However, research

conducted by Martelli et al. (1989) indicated a coefficient alpha reliability of .97 for the total PSS. They also found that the subscales derived from the Spielberger et al. (1981) two-factor solution produced reliabilities of .95 and .94 for the administrative/ organizational factor of stress and physical/psychological factor of stress, respectively.

Since the PSS was slightly modified, a reliability analysis was performed on the overall instrument and its corresponding subscales based on this study's research sample. The PSS produced a reliability coefficient of .96. Reliability coefficients for the instrument's two subscales produced a .94 for administrative/organizational pressure and a .92 for physical/psychological threats.

Defining Issues Test

Moral reasoning was measured through the use of the DIT, which was designed and developed by James Rest during the 1970s. Rest (1979) indicated that the DIT measures moral reasoning at Stages 2 through 6. The DIT was a paper-and-pencil inventory that consisted of six moral dilemmas about social issues in which each dilemma was followed by 12 related considerations in the form of questions or statements (see Appendix C). Each of the considerations characterized a particular stage of moral reasoning. The instrument asked participants to rate and rank the considerations in terms of how important that issue is in making a moral decision (i.e., from Most Important to Fourth Most Important). The instrument could be either hand or computer scored and took approximately 40 minutes to complete.

The DIT and its subsequent research were based on Kohlberg's moral developmental theory, and the characterization of the stages assumed in the DIT is

basically Kohlberg's. In fact, Rest (1986b) indicated several differences between the DIT and Kohlberg:

> 1. Kohlberg's assessment asks a subject to spontaneously generate a solution de novo to a problem, whereas the DIT asks a subject to evaluate various considerations provided to the subject.
>
> 2. Kohlberg's procedure requires a judge to classify a subject's response according to scoring guides, whereas the DIT requires the subject himself to classify his own responses, thus making objective scoring possible.
>
> 3. Kohlberg's assessment locates a subject in a developmental sequence by stage typing, whereas the DIT's P or D index locates a subject in terms of a continuous number representing the developmental continuum. The way that a subject's development is indexed depends on a number of factors.
>
> 4. In the realm of conducting research on a subject's judgments of stage-prototypic statements, Rest formulated definitions of stage characteristics which draw heavily on Kohlberg's stage discussions but is also different in some respects. (p. 4.1)

Rest noted that the DIT does not give scores strictly equivalent to Kohlberg's test. In fact, correlations for heterogeneous groups were up to the .70s, whereas homogenous groups produced correlations that were much lower. Rest indicated that the strategy of DIT research has not been to produce a paper-and-pencil objective test which predicts to existing measures, but to take the same basic theoretical approach and examine the developmental characteristics of a measure which uses a different data source, different method of data categorization, and different ways of indexing development. He warned that it was inappropriate to use the DIT to predict scores on Kohlberg's test.

Further research on the DIT has prompted Rest et al. (1999) to take a neo-Kohlbergian approach. Rest indicated that the main problems with Kohlberg's theory were: (1) Kohlberg's overextension of Piaget in his model of psychological development;

(2) his overextension of Rawls in his philosophical theory of normative ethics; and (3) limited research findings on Postconventional thinking. Rest argued that the DIT does follow Piaget in being a developmental approach, but adopts a more complex model of stage development and attempts to define stages in terms of "justice operations" or in terms of the "staircase metaphor." The DIT neo-Kohlbergian approach recognized the Rawls approach to normative ethics, but also recognized other ways of proposing shareable ideals. Postconventional thinking as defined by the DIT is broader than Kohlberg's approach. Finally, Rest's neo-Kohlbergian method of assessment is not dependent on verbal expressiveness as is Kohlberg's production task, allowing the DIT to credit people with a more tacit understanding of Postconventional thinking, the main index of the DIT (Rest et al., 1999).

The DIT was standardized on a composite sample of 1,080 subjects made up of 250 junior high, 250 senior high, 250 college students, and 250 graduate students (Davison, 1979). The age range of the sample was 15 to 82 years and consisted of 424 males and 452 females. The sample used in Davison's study was a composite of 23 smaller studies from various areas of the United States, each reporting age/education and P score. An ANOVA test on the sample produced a main effect for educational level indicating very strong differentiation of age/education groups (Davison, 1979; Rest, 1979, 1986a; Rest et al., 1999).

Education had the most significant relationship to DIT scores among several demographic variables. The P scores of junior-high-school subjects averaged in the 20s, senior-high-school subjects were in the 30s, college subjects were in the 40s, graduate

students were in the 50s, and adults-in-general were in the 40s. Rest (1986b) further indicated that education was far more predictive of DIT scores than chronological age and this was found to hold true in both cross-sectional and longitudinal studies.

Several studies have indicated correlations of DIT scores with achievement and IQ tests (Rest, 1986b). Most of the correlations ranged from the .20s to the .50s. In fact, Kohlberg (1969) indicated that the correlations of his measure of moral judgment to IQ tests were usually in the range of .30 to .50. Rest further related that math and science test scores seemed to predict DIT scores as well as language, vocabulary, or social science test scores, suggesting that it was due to the general factor of intelligence that these tests have in common with the DIT and not some special factor or skill. High scores on the DIT were more attributed to general cognitive development rather than reading or vocabulary skills.

Further research on DIT scores with other demographic variables have indicated that the intellectual milieu as represented by region of the country and religious membership assessed at the congregational level is associated with moral judgment. Age was related to the DIT scores for student groups but not for adult groups. Other variables, such as gender, socioeconomic status, political party, type of residence, profession, or college major, did not have consistent relationships with DIT scores (Rest, 1986b).

Scoring for the DIT was performed in terms of stage percentages, or in other words, the percentage of considerations rated relatively high for each stage. The most-used index of the DIT has been the "P" score, or the "weighted sum of ranks" for

"Postconventional items" derived from Kohlberg's Stages 5 and 6. Rest indicated that the P score is interpreted as "the relative importance a subject gives to principled moral considerations in making a decision about moral dilemmas" (Rest, 1986b, p. 4.2).

In order to calculate the raw P score, first look only at the four rankings at the bottom of each story (i.e., the numbers in response to the questions, "From the list of questions above, select the four most important: Most Important _____, Second Most Important _____, Third Most Important _____, Fourth Most Important _____). Next, the item marked "most important" must be compared to the instrument's score chart (Rest, 1986a) in order to find out which stage the item exemplifies. For instance, if a subject's first rank on the Heinz story was Item 6, this would be a Stage 4 choice; Item 10 on the Heinz story is Stage 5A. After locating the item's stage, the choices are weighted by giving a weight of 4 to the first rank ("most important"), 3 to the second rank ("second most important"), 2 to the third rank, and 1 to the fourth rank. Points are then totaled across the six stories for each stage. For instance, in the example above where the first choice was Item 6, a Stage 4 item, a weight of 4 would be entered on the data sheet under Stage 4 in the box for the Heinz story. If the item ranked "second most important" was item 10, a Stage 5A item, then 3 points would be put under Stage 5A. If Item 4 were ranked 3rd, 2 points would be placed under M, and so on. The completed table on the data sheet will have 4 entries for each story, totaling 24 entries altogether. Each stage column is then totaled. To obtain the raw Principled morality score ("P"), the points from Stages 5A, 5B, and 6 are added together. The raw stage scores are then converted to percentages by dividing the raw score by .6.

Rest (1986b) and Rest et al. (1999) noted that from the six stories, the total raw score ranges from 0 to 57 because there are not four P items in every story. Rest noted that the P percentage can range from 0 to 95 instead of 100 because there is no 4th possible Principled item to choose from on three stories.

For the purposes of this study, the police officers were divided into three groups based on their P% score. Hence, officers with a P% score up to 27 were placed in the low third or "low moral development" group. Officers with a P% score of 28 to 41 were placed in the middle third or "average moral development" group. Officers with a P% score of 42 and higher were placed in the high third or "high moral development" group.

The DIT has been considered a valid and reliable measure of general moral judgment (Rest et al., 1999). Davison (1979) indicated that the overall indices of reliability for the P score and the empirically weighted sum for the six stories have internal consistency and test-retest reliabilities in the high .70s and low .80s for age heterogeneous samples and in the .70s for P scores with age homogeneous samples. As for concurrent validity, the overall indices correlated in the .40s with a measure of general aptitude, in the .60s with a measure of comprehending moral concepts, in the high .40s or .50s with a measure of law-and-order orientation, and in the .50s or .60s with a measure of political tolerance.

Face validity

The DIT's task involves making judgments about moral problems. Rest (1986b) indicated that the DIT concerned itself with a subject's reason behind the choice, not just what line of action the subject favors.

Reliability

The DIT manual (Rest, 1986a) indicates that the test-retest reliabilities for the P score were generally in the high .70s or .80s. The Cronbach's Alpha index of internal consistency was generally in the high .70s.

Criterion group validity

Rest (1986a) compared the development of moral judgment of a group of doctoral students in moral philosophy and political science to a group of ninth-graders. Rest found that the doctoral students received higher moral reasoning scores while the ninth-graders received lower scores. Groups of high-school subjects and college subjects were placed between the doctoral students and ninth-graders. According to Rest, group differences were highly statistically significant and accounted for nearly 50% of the variance in DIT scores in some studies.

Longitudinal validity

An in-depth discussion of several longitudinal studies was provided in Rest's Development in Judging Moral Issues (1979). Rest reported significant upward trends over 4 years at three testings for the P score. Similarly, analysis of individual patterns of change demonstrated an upward trend. Cohort-sequential and time-sequential analysis indicated that the upward trend could not be attributed to generational or cultural change, but rather can be attributed to individual ontogenetic change. Furthermore, studies indicated that the longitudinal trends could not be attributed to testing effects or sampling bias.

Convergent-divergent correlations

The DIT manual (Rest, 1979, 1986a) indicates that the correlations between the DIT and other measures of moral reasoning, such as various versions of Kohlberg's test and the Comprehension of Moral Concepts Test, attained .60s and .70s, averaging about .50. With other measures of cognitive development and intelligence the correlations were generally lower, in the .20s to .50s range, averaging about .36. The correlations were usually non-significant or inconsistent with various measures of attitudes and personality. Demographic variables such as sex, socioeconomic class, and political party produced correlations that were usually non-significant.

The discriminant validity of the DIT was supported by several other studies (Rest, 1979, 1986a). Several studies indicated that even when other variables, such as age, IQ, socioeconomic status, and attitudes, are controlled or statistically partialled out, the DIT continued to significantly predict behavior.

Validation through experimental enhanced studies

Studies involving educational interventions have demonstrated changes in DIT scores. The movement of experimental groups in moral education interventions was slow, and the amount of change in these groups was less than in the longer-term longitudinal studies, and change induced by educational intervention required a heavy focus on moral problem solving. A study that compared an ethics class with a logics class found that the logics class moved subjects up on a logic test but not on the DIT, whereas the ethics class moved subjects up on the DIT but not on the logic test.

Faking studies

Rest (1986a) cited a research study conducted by McGeorge (1975) in which one group of subjects was asked to "fake-good" on the DIT while another group was asked to "fake-bad." It was found that under these conditions, subjects were exhibiting the highest principles of justice and that the test-taking set of "faking-good" did not appreciably increase scores on the DIT.

Validation through studies of internal structure

A scaling technique derived from unfolding models of multidimensional scaling and latent trait theory was used to scale the DIT items (Rest, 1979, 1986a). It was found that when the items were grouped according to their theoretical stages, the averages of these groups were ordered from 2, 3, 4, 5, and 6. According to Rest, this indicated that the empirical values corresponded to the theoretical sequence.

Coping Response Inventory

This 24-item paper-and-pencil instrument was used for collecting data on the coping strategies used by police officers. The CRI was developed by Hart (1988) and was based on the earlier research of Billings and Moos (1984). The CRI was a paper-and-pencil inventory that consisted of 28 statements, which assessed the coping strategies of police officers (see Appendix C). The CRI contains two subscales to measure coping schemes: (1) Problem-Focused Coping and (2) Emotion-Focused Coping. The problem-focused coping domain consists of 11 items (1-4 and 9-15), while the emotion-focused coping domain consists of 13 items (5, 6, and 16-26).

In order to assist with recall, subjects were first asked to list the specific work event that bothered them the most during the preceding 6 months. Subjects were then asked to answer five questions related to how they felt about the specific work hassle or problem they listed based on a 7-point scale (i.e., 1, 2, 3, 4, 5, 6, or 7). Next, subjects were asked to read each statement that people may use to cope with their hassles and problems and then circle the number on a 5-point scale (i.e., 0, 1, 2, 3, or 4) which best described how much they used that strategy to cope or deal with the specific hassle (e.g., Not at all = 0 to Very much so = 4) listed on the previous page of the instrument. Hart et al. (1995) indicated that this procedure is generally used for assessing situation-specific coping; however, Hart (1988) found that police officers reported using similar strategies to cope with bothersome events in the work and non-work domains of their lives. The instrument could either be hand or computer scored and took approximately 10 minutes to complete.

The earlier research of Billings and Moos (1984), on which the CRI was based, advocated the stress and coping paradigm. This particular paradigm held that life stressors are associated with a wide range of disorders, whereas coping resources are compensatory factors that help to maintain health. From their work with adults suffering from unipolar depression it was indicated that the manner in which environmental stressors are appraised and the particular coping responses used to handle stressors are believed to play a pivotal role in depression. Billings and Moos classified coping responses within three general domains: (1) appraisal-focused coping efforts to define and redefine the personal meaning of a situation; (2) problem-focused coping responses

that seek to modify or eliminate the source of stress by dealing with the reality of the situation; and (3) emotion-focused coping responses that control stress-related emotions and attempt to maintain affective equilibrium. They further indicated that such factors as chronic strains, severity of the stressful event, gender, education, socioeconomic status, and social resources were related to the severity of dysfunction and the type of coping response used.

The original sample used in the development of the CRI (Hart, 1988; Hart et al., 1995) consisted of 330 police officers from the Victoria Police Department in Australia. This sample was part of a longitudinal study on police stress and well-being. The sample ranged in rank from officers, senior sergeants, sergeants, senior constables, to constables, and varied in their assigned duties (i.e., general duties, criminal investigation, traffic operations, community policing, and other support groups). The sample also varied in areas of service, such as metropolitan and county. Their length of service ranged from less than 1 year to 34 years, and their ages ranged from 20 to 57 years. As far as gender is concerned, males comprised 88% of the sample, while females comprised 12%.

Exploratory and confirmatory factor analysis

Hart et al. (1995) indicated that a series of exploratory and confirmatory factor analysis supported the theoretical structure of the CRI. A confirmatory factor analysis at the first-order level showed that the 24 items of the instrument measured six different dimensions of coping: (1) Affective Regulation (six items, alpha = .76); (2) Emotional Discharge (five items, alpha = .72); (3) Information Seeking (two items, alpha = .71); (4) Logical Analysis (four items, alpha = .77); (5) Problem Solving (five items, alpha = .71);

and (6) Seeking Emotional Support (two items, alpha = .75). The factor loadings ranged from .36 to .92 ($\underline{M}$ = .63, $\underline{SD}$ = 13).

The second-order structure of the CRI was investigated through performing an exploratory principal-component analysis on the factor scores for each of the first-order dimensions. Hart et al. (1995) used Kaiser's criterion and found that 66.8% of the variance in the first-order dimensions could be explained by two second-order factors. The results of an oblimin rotation showed that the Emotional Discharge, Affective Regulation, and Seeking Emotional Support dimensions had the strongest factor loadings (.88, .84 and .69, respectively) on the first factor. Problem Solving, Logical Analysis, and Information Seeking had the strongest loadings (.83, .82 and .75, respectively) on the second factor. The first second-order factor was labeled Emotion-Focused Coping, while the next second-order factor was labeled Problem-Focused Coping.

A confirmatory second-order factor analysis indicated that Problem-Focused Coping explained 66% of the variance in Problem Solving, 47% of the variance in Logical Analysis, and 29% of the variance in Information Seeking. Emotion-Focused Coping explained 76% of the variance in Affective Regulation, 64% of the variance in Emotional Discharge, and 54% of the variance in Seeking Emotional Support. The true score correlation between the two factors was .45 ($\underline{p} < .001$).

Reliability

Hart (1988) indicated that for Problem-Focused Coping, reliabilities for its three dimensions ranged from .60 to .81, while for Emotion-Focused Coping, reliabilities for its three dimensions ranged from .66 to .74. Hart et al. (1995) indicated that the unit

weighted composite scores for Problem-Focused Coping and Emotion-Focused Coping on the CRI were alpha = .78 and .80, respectively. The Pearson product-moment correlation between the factor regression score, based on the second-order confirmatory analysis, and the unit weighted score was .99 for Problem-Focused Coping and .97 for Emotion-Focused Coping.

A reliability analysis was performed on the CRI and its corresponding two subscales based on this study's research population. The CRI produced a reliability coefficient of .73. Reliability coefficients for the instrument's two subscales were a .73 for Problem-Focused Coping and a .64 for Emotion-Focused Coping.

Null Hypotheses and Statistical Analysis Method

The following null hypotheses were tested to answer the research questions:

Hypothesis 1. There is no relationship between current, perceived administrative/ organizational police stress and moral reasoning.

Hypothesis 2. There is no relationship between current, perceived physical/ psychological-threats police stress and moral reasoning.

Hypothesis 3. There is no relationship between current, perceived administrative/ organizational police stress and coping styles.

Hypothesis 4. There is no relationship between current, perceived physical/ psychological-threats police stress and coping styles.

Hypotheses 1-4 were tested by the Pearson product-moment correlation for each of the variables.

Hypothesis 5. There is no relationship between current, perceived administrative/

organizational police stress and the following demographic variables: age, years of law enforcement experience, years of education, religious affiliation, frequency of religious service attendance, and the type of community environment in which the officer serves.

Hypothesis 6. There is no relationship between the current, perceived physical/ psychological-threats police stress and the following demographic variables: age, years of law enforcement experience, years of education, religious affiliation, frequency of religious service attendance, and the type of community environment in which the officer serves.

Hypotheses 5 and 6 were tested by the Pearson product-moment for age, years of law enforcement experience, and years of education; Spearman-Rho for frequency of religious service attendance; and an ANOVA with post hoc tests for religious affiliation and the type of community in which the officer serves.

For testing each of the research hypotheses, alpha was set at .05.

Treatment of Data

Of the 41 contacted agencies, 28 agencies (68.3%) representing 357 police officers participated in the study. A total of 105 (29.4%) surveys were returned. I then checked each survey for completeness.

Out of the 105 returned surveys, 15 (14.3%) were eliminated for failing to meet the DIT's internal consistency reliability checks (Rest, 1986a). One check was the M score. The M score consists of items that do not represent any stage of moral thinking, but represents a subject's tendency to endorse statements for their pretentiousness rather than their meaning. M scores with a raw score greater than eight should be eliminated.

The second check was the Consistency Check. This involves comparing a subject's ratings of importance given to each of the 12 items for each story with their first and second choice rankings of most importance for that story. If the subject's selected first or second choices for rankings of most importance are rated higher than the ratings of the items chosen as first or second, then there is an inconsistency between the subject's rankings and ratings. Rest (1986a) recommended two rules of thumb for the Consistency Check in order to eliminate a subject's entire test protocol: (1) if there are inconsistencies on more than two stories, or (2) if the number of inconsistencies on any story exceeds eight instances. Fifteen subjects were eliminated from this research study entirely through Rest's second rule of thumb for the Consistency Check. Rest (1986a) indicates that between 5 and 15% of a sample are lost due to the reliability checks in many studies requesting volunteers.

There were 19 (18.1%) subjects eliminated for not completing crucial items on the questionnaires. Specifically, 17 subjects failed to complete the DIT, while 2 failed to complete the DIT and CRI. The resulting N for this study that was used for statistical analyses was 71.

Prior to performing any statistical analysis procedures, data for several items on the demographic questionnaire were transformed. One item involved the subject's age. Subjects were asked to list the year of their birth on the questionnaire. The year of birth was transformed into a ratio variable for the subject's age at the time of the study by subtracting 1999 from the listed year of birth. A second item entailed the subject's level of education. The questionnaire asked subjects to select their education level from six

choices (H. S. Diploma/GED, some college, Associate's Degree, Bachelor's Degree, Master's Degree, and other). These items were transformed into a ratio variable to represent the years of education a subject had at the time of the study. Hence, H. S. Diploma/GED represented 12 years, some college represented 13 years, Associate's Degree represented 14 years, Bachelor's Degree represented 16 years, Master's Degree represented 18 years, and other represented 19 years.

On several of the independent variable subcategories, small frequencies occurred. This necessitated combining responses in order to bring the expected frequencies to an adequate size. Thus, any subcategory with a frequency less than five was combined. As a result, religious affiliation was coded into four categories: No religious affiliation ($\underline{n}$ = 10), Catholic ($\underline{n}$ = 19), Protestant (Methodist, Lutheran, Seventh-day Adventist, Non-Denominational, and Baptist with $\underline{n}$ = 32), and Other ($\underline{n}$ = 10). Frequency of church attendance was coded into two categories: Never attend ($\underline{n}$ = 32) and one or more times a month ($\underline{n}$ = 39). The community environment in which the officer serves was coded into three categories: Urban ($\underline{n}$ = 22), Suburban ($\underline{n}$ = 23), and Rural ($\underline{n}$ = 23).

CHAPTER IV

DATA FINDINGS AND ANALYSIS

The purpose of this study was to examine the relationship between police stress and moral reasoning, coping style, and selected demographic variables in a population of duly sworn full-time certified Michigan police officers using a demographic questionnaire, PSS, DIT, and CRI. The demographic variables were the officer's age, years of law enforcement experience, education level, religious affiliation, frequency of religious service attendance, and the type of community in which the officer was assigned. Confidentiality and anonymity were maintained throughout the study.

This chapter presents the findings of the study. First, the research data are presented on the sample and the instruments. Finally, the results of the study hypotheses are presented.

General Characteristics of the Study Population

Of the 41 contacted law enforcement agencies representing 488 police officers within the Tri-County area, 28 agencies (68.3%) representing 357 police officers participated in the research study. There were 105 (29.4%) police officers who returned the questionnaires, of which 34 of these subjects returned invalid questionnaires, thus the resulting N was 71. The officers who participated in the study were comprised of City (45.1%), County (14.1%), State (18.3%), Township (16.9%), Village (4.2%), and

Village/Township (1.4%) police agencies.

Description of the Sample

Table 5 provides the demographic data of the sample studied. The study sample consisted of 71 subjects. Of these, 65 were Male (91.5%) and 6 were Female (8.5%). As far as Ethnic Identity, 62 were Caucasian (87.3%), 2 were African American (2.8%), 2 were Hispanic/Latino (2.8%), 1 was Native/Alaskan American (1.4%), and 4 did not respond to this question (5.6%).

From the data in Table 5, 5.6% of the research sample had a H. S. Diploma/GED, 21.1% had Some College, 29.6% had an Associate's Degree, 40.8% had a Bachelor's Degree, and 2.8% had a Master's Degree. The data also indicated that 71.8% of the subjects were Married, 8.5% were Divorced, and 19.7% were Single.

In the area of Present Work Assignment, 10 subjects were assigned to Patrol, 34 were assigned to Patrol and Traffic, 3 were assigned to community relations (i.e., D.A.R.E., Community Policing, and School Liaison), 5 were Investigative (i.e., Detective and Narcotics), 6 were Administrative, 11 were designated as "Other," and 2 did not respond to this question. Furthermore, 22 of these subjects worked in an Urban community, 23 worked in a Suburban community, 23 worked in a Rural community, and 3 worked in a community setting designated as "Other."

The data from Table 5 also indicate that of the 71 subjects, 34 were designated as either a Police Officer/Patrolman/Patrolwoman, 8 were Sheriff Deputies, 12 were State Troopers, 9 were Sergeants/Detective Sergeants, and 8 were Command (i.e., Lieutenant,

TABLE 5

DEMOGRAPHIC DATA

Demographic Variables	Frequency (N=71)	Percentage (100%)
Gender		
Male	65	91.5
Female	6	8.5
Ethnic Identity		
Caucasian	62	87.3
African American	2	2.8
Hispanic/Latino	2	2.8
Native/Alaskan American	1	1.4
Missing	4	5.6
Educational Level		
H. S. Diploma/GED	4	5.6
Some College	15	21.1
Associate's Degree	21	29.6
Bachelor's Degree	29	40.8
Master's Degree	2	2.8
Present Work Assignment		
Patrol	10	14.1
Patrol & Traffic	34	47.9
Community Relations	3	4.2
Investigative	5	7.0
Administrative	6	8.5
Other	11	15.5
Missing	2	2.8
Type of Community Served		
Urban	22	31.0
Suburban	23	32.4
Rural	23	32.4
Other	3	4.2
Current Job Title/Rank		
Police Officer/Patrol.	34	47.9
Sheriff Deputy	8	11.3
State Trooper	12	16.9
Sergeant/Detective Sgt.	9	12.7
Command	8	11.3
Marital Status		
Married	51	71.8
Divorced	6	8.5
Single	14	19.7

Table 5--Continued.

Shift Hours		
8 hour shifts	65	91.5
10 hour shifts	3	4.2
Other	3	4.2
Shift Rotation Schedule		
Monthly	8	11.3
Bimonthly	10	14.1
Weekly	1	1.4
Permanent	35	49.3
Other	17	23.9
Religious Affiliation		
None	10	14.1
Baptist	7	9.9
Catholic	19	26.8
Lutheran	10	14.1
Methodist	10	14.1
Non-Denominational	4	5.6
Seventh-day Adventist	1	1.4
Other	10	14.1
Religious Service Attendance (per month)		
Never	32	45.1
1-2 times	26	36.6
3-4 times	12	16.9
5 or more	1	1.4

Chief, and Sheriff). Of these subjects, 91.5% worked 8-hour shifts, 4.2% worked 10-hour shifts, and 4.2% worked shift hours designated as "Other." In addition, 49.3% worked a Permanent shift rotation schedule, 11.3% worked Monthly (i.e., every 28 days) rotations, 14.1% worked bimonthly (i.e., every 2 months) rotations, 1.4% worked weekly rotations, and 23.9% worked "Other" rotation schedules.

Data from Table 5 concerning Religious Affiliation indicate that 14% have no religious affiliation, 27% were Catholic, and 41% were affiliated with Protestant denominations. From these data, 45% never attended any religious services, 37% attended 1-2 times a month, 17% attended 3-4 times a month, and 1% attended 5 or more times a month.

The age range of the subjects who participated in the study was between 23 and 55 years; with a SD = 7.87. The mean age of the 71 subjects was 34.9 years. For years of law enforcement experience, 11.4 years was the mean time of service in police work. The time of service in police work ranged between 1 and 29 years; with a SD = 8.36.

Descriptive Results

Police stressors

Table 6 lists the 60 stressors and gives the mean and rank of each stressor for the entire 71 research subjects. The 10 highest ranked stressors were items: (49) "Killing someone in the line of duty"; (26) "Fellow officer killed in the line of duty"; (54) "Exposure to battered or dead children"; (44) "Physical attack on one's person"; (13) "Inadequate support by the department"; (19) "High speed chases"; (12) "Inadequate

TABLE 6

RANKING OF STRESSORS

Police Stressor	Mean (N = 71)	SD	Rank
49. Killing someone in the line of duty	4.66	.79	1*
26. Fellow officer killed in the line of duty	4.55	.86	2*
54. Exposure to battered or dead children	3.94	1.19	3*
44. Physical attack on one's person	3.87	1.08	4*
13. Inadequate support by department	3.79	1.17	5*
19. High-speed chases	3.70	1.14	6*
12. Inadequate support by supervisor	3.59	1.10	7*
4. Fellow officers not doing their job	3.42	.95	8*
32. Insufficient manpower to adequately handle a job	3.38	1.07	9*
25. Confrontations with aggressive crowds	3.31	1.15	10*
34. Excessive or inappropriate discipline	3.30	1.27	11
46. Situations requiring the use of force	3.28	1.15	12
27. Distorted or negative press accounts of police	3.27	1.11	13
21. Responding to a felony in progress	3.23	1.10	14
16. Delivering a death notification	3.20	1.24	15
43. Accident in a patrol car	3.17	1.18	16
60. Excessive paperwork	3.13	1.22	17
38. Inadequate or poor equipment	3.11	1.08	18
8. Incapacitating physical injury on the job	3.04	1.46	19
28. Making critical on-the-spot decisions	3.03	.99	20
6. Political pressure from within the department	3.00	1.25	21
29. Ineffectiveness of the judicial system	2.97	1.08	22
50. Making arrests while alone	2.97	1.04	23
5. Court leniency with criminals	2.97	1.13	24
2. Changing from day to night shift	2.96	1.38	25
20. Difficulty getting along with supervisors	2.93	1.31	26
55. Plea bargaining and technical rulings leading to case dismissal	2.92	1.18	27
48. Court decisions unduly restricting police	2.92	.98	28
47. Job conflict (by-the-book vs. by-the-situation)	2.92	1.07	29
53. Poor or inadequate supervision	2.87	1.16	30
36. Demands made by family for more time	2.87	1.21	31
15. Assignment of incompatible partner	2.86	1.25	32
42. Inadequate salary	2.82	1.22	33
18. Dealing with family disputes and crisis situations	2.77	1.04	34
23. Public criticism of police	2.77	1.15	35
59. Put-downs and mistreatment of police in court	2.73	1.13	36
1. Assignment of disagreeable duties	2.73	1.01	37
22. Experiencing negative attitudes toward police officers	2.72	1.11	38
33. Lack of recognition for good work	2.72	1.11	39
14. Court appearances on day off or day following night shift	2.70	1.15	40
3. Assignment to new or unfamiliar duties	2.70	.98	41
30. Ineffectiveness of the correctional system	2.69	1.10	42
40. Racial pressures or conflicts	2.65	1.15	43
7. Political pressure from outside the department	2.56	1.26	44

Table 6—Continued.

39. Assignment of increased responsibility	2.56	1.01	45
24. Disagreeable department regulations	2.54	.98	46
11. Exposure to the death of civilians	2.51	1.07	47
51. Public apathy towards police	2.48	1.00	48
41. Lack of participation on policy-making decisions	2.48	1.08	49
52. Competition for advancement	2.35	1.00	50
57. Exposure to adults in pain	2.34	1.00	51*
56. Frequent changes from boring to demanding activities	2.34	.89	52*
9. Working a second job	2.27	1.24	53*
31. Personal insult from a citizen	2.15	.99	54*
45. Demands for high moral standards	2.14	1.14	55*
58. Possibility of minor physical injury on the job	2.10	.94	56*
37. Promotion or commendation	2.06	.98	57*
10. Strained relations with non-police friends	2.01	.90	58*
35. Performing non-police tasks	2.01	1.06	59*
17. Periods of inactivity or boredom	1.93	.95	60*

*Indicates most and least ranked stressors

support by supervisor;" (4) "Fellow officer not doing their job;" (32) "Insufficient manpower to adequately handle a job;" and (25) "Confrontations with aggressive crowds."

The 10 least ranked stressors were items: (57) "Exposure to adults in pain;" (56) "Frequent changes from boring to demanding activities;" (9) "Working a second job;" (31) "Personal insult from a citizen;" (45) "Demands for high moral standards;" (58) "Possibility of minor physical injury on the job;" (37) "Promotion or commendation"; (10) "Strained relations with non-police friends;" (35) "Performing non-police tasks;" and (17) "Periods of inactivity and boredom."

For the purposes of providing additional descriptive data regarding police stress among the research sample the means of the two stress subscales were compared. First, the raw scores for the administrative/organizational pressure and physical/ psychological

threats stress subscales were converted to z scores. The z scores were then converted to t scores. The subjects were then divided into two groups. If a subject's t score was below the M = 50, the subject was placed in the lower half stress group. If a subject's t score was above the M = 50, the subject was placed in the upper half stress group. This procedure was conducted for both, administrative/organizational pressure stress and physical/psychological threats stress. A crosstabulation analysis of the administrative/organizational pressure stress group by the physical/psychological threats stress group indicated that 25 (35.2%) subjects of the lower half group of administrative/organizational pressure stress were in the lower half group of physical/psychological threats stress (Table 7). Eleven (15.5%) subjects of the lower half group of administrative/organizational pressure stress were in the upper half group of physical/psychological threats stress. According to Table 7, 9 (12.7%) subjects of the upper half group of administrative/organizational pressure stress were in the lower half group of physical/psychological threats stress. Twenty-six (36.6%) subjects of the upper half group of administrative/organizational pressure stress were in the upper half group of physical/psychological threats stress. These findings would suggest that a third of police subjects in the present study perceived the administrative/organizational stresses in policing as stressful as the physical/psychological threats stress of the job.

Moral reasoning

The P scores for this study ranged between 5.00 and 63.33; with a mean of 32.91 and a SD of 10.4. Out of the 71 subjects, 20 fell in the "low" development indice of moral judgment, 42 were in the "middle" development indice of moral judgment, and 9

TABLE 7

CROSSTABULATION OF ADMINISTRATIVE/ORGANIZATIONAL STRESS BY PHYSICAL/PSYCHOLOGICAL STRESS

		[a]Physical/Psychological Threats Stress Group		
		Lower Half	Upper Half	Row Total
[b]Administrative/Organizational Pressure Stress Group				
Lower Half	n	25	11	36
	%	35.2	15.5	50.7
Upper Half	n	9	26	35
	%	12.7	36.6	49.3
Column Total	n	34	37	71
	%	47.9	52.1	100

Note. [a]Physical/psychological threats stress: N = 71, M = 50.00, and SD = 10.00.
[b]Administrative/organizational pressure stress: N = 71, M = 50.00, and SD = 10.00.

fell in the "high" development indice of moral judgment.

Hassles and/or problems

There were 70 subjects who listed a specific hassle or problem that has bothered them the most as a police officer during the past 6 months on the CRI. One subject did not specify a specific hassle or problem. Table 8 provides information concerning the first section of the CRI involving five questions that illicits the subject's current affective response to the specific hassle or problem listed. According to Table 8, 35.2% felt that the event or experience that they listed was extremely bothersome, 26.8% felt that it was extremely important for them to cope or deal effectively with the listed hassle or problem, 36.6% felt they had no control at all over the listed event or experience, 15.5% felt that they coped very well with the listed hassle or problem, and 21.1% felt to some

TABLE 8

DATA FROM THE CRI'S FIVE AFFECTIVE QUESTIONS CONCERNING THE SPECIFIED HASSLE OR PROBLEM

1. Overall, how bothersome was the event or experience that you listed?

Value Label	Value	f	%	M	SD
Barely Bothersome	1	0	0	5.77	1.09
	4	10	14.1		
	5	21	29.6		
	6	14	19.7		
Extremely Bothersome	7	25	35.2		
(Missing)		1	1.4		
	Total	71	100.0		

2. How important was it for you to cope or deal effectively with the hassle or problem you have listed?

Value Label	Value	f	%	M	SD
Not at all important	1	2	2.8	5.56	1.39
	2	1	1.4		
	3	2	2.8		
	4	7	9.9		
	5	16	22.5		
	6	23	32.4		
Extremely important	7	19	26.8		
(Missing)		1	1.4		
	Total	71	100.0		

3. How much control do you think you had over the event or experience?

Value Label	Value	f	%	M	SD
No control at all	1	26	36.6	2.61	1.68
	2	12	16.9		
	3	11	15.5		
	4	12	16.9		
	5	5	7.0		
	6	1	1.4		
A lot of control	7	3	4.2		
(Missing)		1	1.4		
	Total	71	100.0		

Table 8 – Continued.

4. Taking everything into account, how well do you feel you have coped with the hassle or problem?

Value Label	Value	f	%	M	SD
Very Badly	1	2	2.8	4.74	1.47
	2	1	1.4		
	3	11	15.5		
	4	16	22.5		
	5	20	28.2		
	6	9	12.7		
Very Well	7	11	15.5		
(Missing)		1	1.4		
	Total	71	100.0		

5. To what extent is the hassle or problem still affecting you?

Value Label	Value	f	%	M	SD
Not at all	1	6	8.5	4.24	1.71
	2	5	7.0		
	3	12	16.9		
	4	15	21.1		
	5	14	19.7		
	6	11	15.5		
Very much so	7	7	9.9		
(Missing)		1	1.4		
	Total	71	100.0		

Note. N = 71.

extent that the listed hassle or problem was still affecting them.

After reviewing the themes of the listed hassles, they were placed into five major categories based on the sources of stress for law enforcement officers from Developing a Law Enforcement Stress Program for Officers and Their Families (1997). Thirty-eight were placed under Administrative/ Organization Hassles, 12 were placed under the Work Itself Hassles, 15 were placed under the Public/Criminal Justice System Hassles, 4 were placed under Psychological/Physical Hassles, and 1 was placed under Minority/Female Officer Hassles (Table 9).

Coping mechanisms

The specified hassle or problem listed on the CRI elicited the type of coping style used by subjects to manage the event in response to the instrument's questions. The problem-focused coping subscale (PFC) score indicated a mean of 26.6 and a SD of .81, while the emotion-focused coping (EFC) subscale score indicated a mean of 19.7 and a SD of .81.

For the purposes of providing additional descriptive data regarding the mechanisms among the research sample the means of the two CRI subscales were compared. First, the raw scores for PFC and EFC subscales were converted to z scores. The z scores were then converted to t scores. The subjects were then divided into two groups. If a subject's t score was below the M = 50, the subject was placed in the lower use coping group. If a subject's t score was above the M = 50, the subject was placed in the higher use coping group. This procedure was conducted for both, PFC and EFC. A crosstabulation analysis of the PFC group by the EFC group indicated that 15 (21.1%)

TABLE 9

SPECIFIC HASSLES OR PROBLEMS LISTED ON THE CRI

ADMINISTRATIVE/ORGANIZATION
- Problems with supervisor (i.e., poor quality, over critical, not doing job)
- Added job duties with no increase in pay
- No more lunch with fellow officers
- Reduced workforce; no reduction in expectations or duties
- Problems with Administration; out of touch
- Lack of support
- Internal conflict and strife
- Promotion
- Problems with local government
- Morale
- Funding of Department; budget issues
- Deadlines for specific criminal investigations
- Parking
- Lack of support on training issues
- Unfair treatment and discipline by supervisors
- Insubordination
- Fellow officers not doing their job
- Dealing with department heads
- Internal investigations

THE WORK ITSELF
- Lack of ability to solve crimes
- Rotating shifts; shift work
- Low pay
- Shooting a suspect
- Learning roles of the job
- Civil lawsuits
- High profile cases
- Minors drinking
- Fatal accidents with children

MINORITY/FEMALE OFFICERS
- Sexual discrimination

THE PUBLIC/CRIMINAL JUSTICE SYSTEM
- Media request
- Racial issues; allegations of racial prejudice
- Apathy of judicial system (i.e., dismissal of cases, problems with prosecutors and judges)
- Public opinion towards police; lack of respect
- Citizen complaints
- Lack of community support
- Lack of punishment for juveniles
- Surveys

PSYCHOLOGICAL/PHYSICAL
- Job a waste of time
- Working with overly aggressive officers
- Dealing with closed minded persons; not listening
- Rumors
- Responsibility without the authority to carry out the means

TABLE 10

CROSSTABULATION OF PROBLEM-FOCUSED COPING
BY EMOTION-FOCUSED COPING

		[a]Emotion-Focused Coping Group		
		Lower Half	Upper Half	Row Total
[b]Problem-Focused Coping Group				
Lower Half	n	15	19	34
	%	21.1	26.8	47.9
Upper Half	n	25	12	37
	%	35.2	16.9	52.1
Column Total	n	40	31	71
	%	56.3	43.7	100

Note. [a]Emotion-focused coping: N = 71, M = 50.00, and SD = 10.00. [b]Problem-focused coping: N = 71, M = 50.00, and SD = 10.00.

subjects of the lower use group of PFC were in the lower use group of EFC (Table 10). Nineteen (26.8%) subjects of the lower use group of PFC were in the higher use group of EFC. According to Table 10, 25 (35.2%) subjects of the higher use group of PFC were in the lower use group of EFC. Twelve (16.9%) subjects of the higher use group of PFC were in the higher use group of EFC. These findings would suggest that the police subjects in the present study seem to use both styles of coping, however; 35% of these offices tend to use a more problem-focused process to manage stressful events.

Testing the Null Hypotheses

This section examines each null hypothesis formulated for this research study and provides the results of the statistical testing of each. The null hypotheses were developed from this study's three research questions. Hypotheses 1-4 were tested by the Pearson

product-moment. Hypotheses 5 and 6 were tested by the Pearson product-moment for age, years of law enforcement experience, and years of education; Spearman-Rho for frequency of religious service attendance; and an ANOVA with post hoc tests for religious affiliation and the type of community in which the officer served. In the text, for each of the six hypotheses, a table is provided giving the results of the analysis.

Research Question 1

Research question 1 asked what are the levels of police stress in a sample of police officers.

In order to determine the levels of police stress among the research sample the data on the PSS subscales were examined. Based on the 5-point scale categories of the PSS, the administrative/organizational pressure stress subscale levels were as follows: 33-65 (low stress), 66-98 (low/moderate stress), 99-131 (moderate stress), 132-164 (moderate/high stress), and 165 (high stress). For the physical/psychological threats stress subscale, the levels were as follows: 23-45 (low stress), 46-68 (low/moderate stress), 69-91 (moderate stress), 92-114 (moderate/high stress), and 115 (high stress). There were four items on the PSS that were filler items and were not used for determining police stress levels. According to Table 11, for administrative/organizational pressure stress levels, 37 (52.1%) fell within low/moderate stress, 26 (36.6%) fell within moderate stress, 6 (8.5%) fell within low stress, and 2 (2.8%) fell within moderate/high stress. Table 11 also indicates that for physical/psychological threats stress levels, 39 (54.9%) fell within moderate stress, 23 (32.4%) fell within low/moderate stress, 5 (7.0%) fell within low stress, and 4 (5.6%) fell within moderate/high stress. The administrative/

TABLE 11

POLICE STRESS LEVELS

Variable	Stress Level Category	n	Percent	M	SD
Administrative/Organizational	Low	6	8.5	53.33	7.52
	Low-Moderate	37	52.1	83.05	8.32
	Moderate	26	36.6	112.61	9.06
	Moderate-High	2	2.8	133.00	1.00
	Total	71	100	92.77	21.16
Physical/Psychological Threats	Low	5	7.0	38.40	8.57
	Low-Moderate	23	32.4	59.57	5.62
	Moderate	39	54.9	78.13	6.09
	Moderate-High	4	5.6	97.50	4.50
	Total	71	100	70.41	14.98

organizational pressure subscale score indicated a mean of 92.8 and a SD of 21.2, while the physical/ psychological threats subscale score indicated a mean of 70.4 and a SD of 14.9.

In support of Table 11, Figure 2 indicates that the majority of police subjects fell within the low-moderate to moderate range of police stress, with the physical/psychological threats stress of policing being slightly more stressful than administrative/organizational stress. These findings suggest that the majority of police subjects perceive stress in policing to be moderately stressful.

Research Question 2

Research question 2 asked if police stress is related to moral reasoning and coping style in a sample of police officers.

Null Hypothesis 1 states: There is no relationship between current, perceived

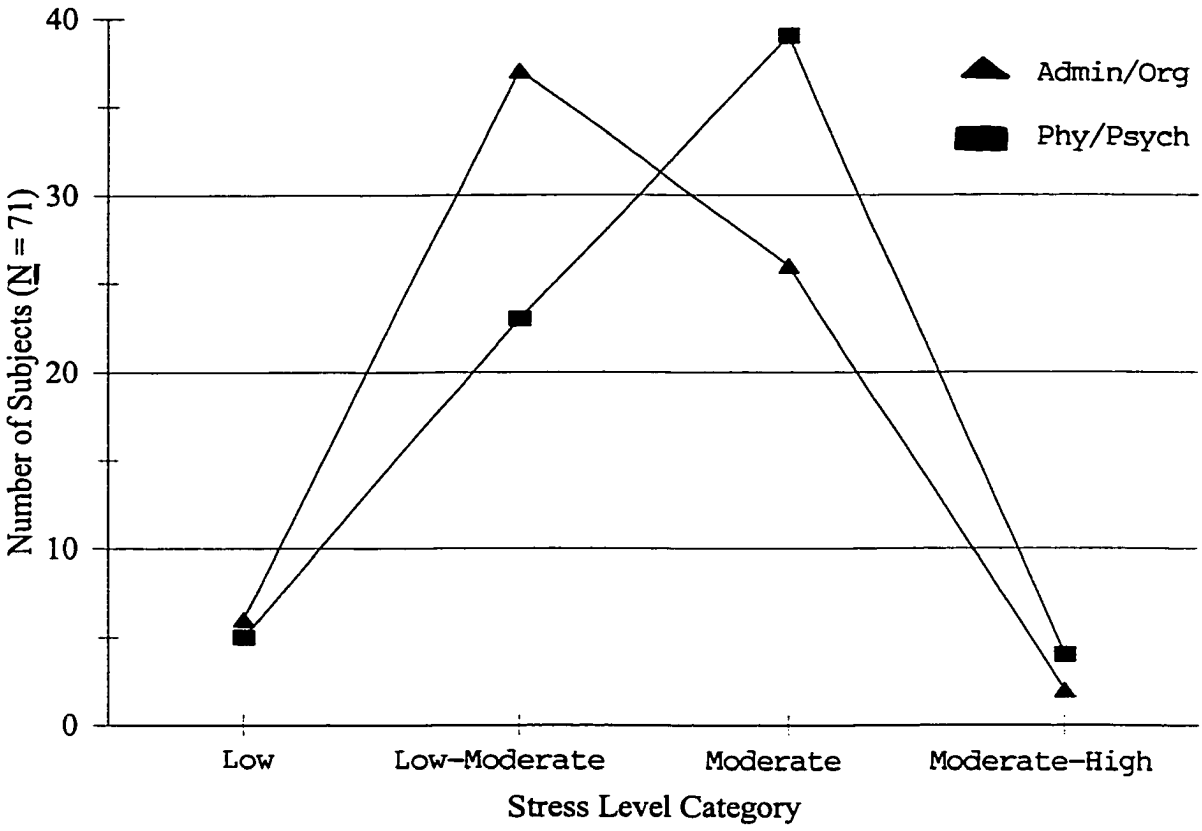

Figure 2. Comparison of the number of subjects between police stress levels (LS = low stress, LMS = low-moderate stress, MS = moderate stress, and MHS = moderate-high stress) for administrative/organizational pressure (number of subject: LS = 6, LMS = 37, MS = 26, and MHS = 2) and physical/psychological threats (number of subjects: LS = 5, LMS = 23, MS = 39, and MHS = 4).

TABLE 12

CORRELATION FOR ADMINISTRATIVE/ORGANIZATIONAL STRESS AND P SCORE

Variables	M	SD	1	2
1. Administrative/ Organizational Pressure	92.77	21.16	1.000	
2. P score	32.91	10.44	-.036	1.000

Note. N = 71.
*p < .05.

administrative/organizational police stress and moral reasoning.

Table 12 presents the correlations among the current, perceived level of administrative/organizational pressure police stress factor score and the P score. The correlation coefficient between the administrative/organizational stress factor score and the P score was negligible and not significant ($r = -.036$, $p > .05$). This result indicated that there was no significant relationship between administrative/organizational stress and moral reasoning. Hence, police stress associated with administrative/organizational pressure was not related to an officer's level of postconventional thinking. Therefore, Hypothesis 1 was retained.

Null Hypothesis 2 states: There is no relationship between current, perceived physical/psychological threats police stress and moral reasoning.

Table 13 presents the correlations among the current, perceived physical/ psychological threats stress factor score and the P score. The correlation coefficient between the physical/psychological threats stress factor score and the P score was negligible and not significant ($r = .153$, $p > .05$). This result indicated that there was no

TABLE 13

CORRELATION FOR PHYSICAL/PSYCHOLOGICAL THREATS STRESS AND P SCORE

Variables	M	SD	1	2
1. Physical/Psychological Threats	70.41	14.98	1.000	
2. P score	32.91	10.44	.153	1.000

Note. N = 71.
*p < .05.

significant relationship between physical/psychological threats stress and moral reasoning. Hence, stress associated with physical/psychological threats in policing was not related to an officer's level of postconventional thinking. Therefore, Hypothesis 2 was retained.

Null Hypothesis 3 states: There is no relationship between current, perceived administrative/organizational police stress and coping styles.

Table 14 presents the correlations among the current, perceived administrative/ organizational pressure police stress factor score, PFC score, and EFC score. The correlation coefficient between the administrative/organizational stress factor score and PFC score ($r = -.074$, $p > .05$) and EFC score ($r = .132$, $p > .05$) was negligible and not significant. This result indicated that there was no significant relationship between administrative/organizational stress, PFC, and EFC. Hence, police stress associated with administrative/organizational pressure was not related to an officer's use of either a more problem-focused or emotion-focused style of coping. Therefore, Hypothesis 3 was retained.

TABLE 14

CORRELATION FOR ADMINISTRATIVE/ORGANIZATIONAL STRESS FACTOR SCORE, PFC SCORE, AND EFC SCORE

Variables	M	SD	1	2	3
1. Administrative/Organizational Pressure	92.77	21.16	1.000		
2. Problem-Focused Coping (PFC)	26.59	6.811	-.074	1.000	
3. Emotion-Focused Coping (EFC)	19.66	6.791	.132	.115	1.000

Note. $N = 71$.
*$p < .05$.

Null Hypothesis 4 states: There is no relationship between current, perceived physical/psychological threats police stress and coping styles.

Table 15 presents the correlations among the current, perceived physical/ psychological threats police stress factor score, PFC score, and EFC score. The correlation coefficient between the physical/psychological threats stress factor score and PFC score ($r = -.040$, $p > .05$) and EFC score ($r = -.018$, $p > .05$) was negligible and not significant. This result indicated that there was no significant relationship between physical/psychological threats stress, PFC, and EFC. Hence, stress associated with the physical/psychological threats in policing was not related to an officer's use of either a more problem-focused or emotion-focused style of coping. Therefore, Hypothesis 4 was retained.

Research Question 3

Research question 3 asked whether police stress can be predicted from moral

TABLE 15

CORRELATION FOR PHYSICAL/PSYCHOLOGICAL THREATS STRESS FACTOR SCORE, PFC SCORE, AND EFC SCORE

Variables	M	SD	1	2	3
1. Physical/Psychological Threats	70.41	14.98	1.000		
2. Problem-Focused Coping (PFC)	26.59	6.811	-.040	1.000	
3. Emotion-Focused Coping (EFC)	19.66	6.791	-.018	.115	1.000

Note. $N = 71$.
*$p < .05$.

reasoning, coping mechanism, and other demographic variables.

Null Hypothesis 5 states: There is no relationship between current, perceived administrative/organizational police stress and the following demographic variables: age, years of law enforcement experience, years of education, religious affiliation, frequency of religious service attendance, and the type of community environment in which the officer serves.

Table 16 presents the correlations among the current, perceived administrative/ organizational pressure stress factor score, age, years of law enforcement experience, and years of education. The correlation coefficient between the administrative/organizational stress factor score and age ($r = -.135$, $p > .05$), years of law enforcement experience ($r = -.147$, $p > .05$), and years of education ($r = .151$, $p > .05$) was negligible and not significant. This result indicated that there was no significant relationship between administrative/ organizational police stress, age, years of law enforcement experience, and years of education. Hence, stress associated with the administrative/organizational

TABLE 16

CORRELATION FOR ADMINISTRATIVE/ORGANIZATIONAL STRESS FACTOR SCORE, AGE, YEARS OF LAW ENFORCEMENT EXPERIENCE, AND YEARS OF EDUCATION

Variables	M	SD	1	2	3	4
1. Administrative/Organizational Pressure	92.77	21.16	1.000			
2. Age	34.99	7.873	-.135	1.000		
3. Years of Law Enforcement Experience	11.42	8.359	-.147	.927*	1.000	
4. Years of Education	14.61	1.478	.151	-.301*	-.272*	1.000

Note. $N = 71$.
*$p < .05$.

pressures in policing was not associated with an officer's age, years of law enforcement experience, and years of education.

A Spearman Rho correlational analysis was performed between the current, perceived administrative/organizational pressure stress factor score and frequency of church attendance. The correlation coefficient between the administrative/organizational pressure stress factor score and frequency of church attendance ($r = .017$, $p > .05$) was low and not significant. This result indicated that there was no relationship between administrative/organizational stress and frequency of church attendance. Hence, stress associated with administrative/organizational pressure in policing was not related to how often an officer attends religious services.

Tables 17 through 20 present the results of the ANOVA used to analyze the relationship between administrative/organizational pressure stress factor score and religious affiliation and the community environment. Table 17 shows the mean scores of

four religious affiliation groups for administrative/organizational stress. It ranges from a low of 85.6 for officers claiming no religious affiliation to a high of 103.6 for those with religious affiliations other than Catholics or Protestants. As Table 18 suggests, no significant differences in administrative/organizational stress were found for the four groups of police officers (F (3, 67) = 1.387, $p > .05$). Table 19 shows the mean scores of three community environment groups for administrative/organizational stress. It ranges from a low of 90.3 for officers working in a rural environment to a high of 95.7 for those working in a suburban environment. As Table 20 suggests, no significant differences in administrative/organizational stress were found for the three groups of police officers ($F(2,67) = .432$, $p > .05$). These findings would suggest that an officer's religious affiliation and the community environment in which he or she works was not associated with his or her current perception of administrative/organizational stress in policing. Thus, Hypothesis 5 was retained.

TABLE 17

MEANS AND STANDARD DEVIATIONS FOR ADMINISTRATIVE/ ORGANIZATIONAL STRESS FACTOR MEAN SCORE BY RELIGIOUS AFFILIATION

Religious Affiliation Groups	N	M	SD
1. None	10	85.60	26.74
2. Catholic	19	94.05	20.05
3. Protestant	32	90.88	20.89
4. Other	10	103.60	16.01
Total	71	92.77	21.16

TABLE 18

ANOVA TEST RESULTS DIFFERENTIATING THE ADMINISTRATIVE/ ORGANIZATIONAL STRESS FACTOR MEAN SCORE BY RELIGIOUS AFFILIATION

Source	SS	df	MS	F	p
Between Groups	1833.15	3	611.05	1.387	.254
Within Groups	29509.25	67	440.44		
Total	31342.39	70			

TABLE 19

MEANS AND STANDARD DEVIATIONS FOR ADMINISTRATIVE/ ORGANIZATIONAL STRESS FACTOR MEAN SCORE BY COMMUNITY ENVIRONMENT IN WHICH THE OFFICER SERVES

Community Environment Groups	N	M	SD
1. Urban	22	94.59	17.76
2. Suburban	23	95.65	23.59
3. Rural	23	90.26	20.49
Total	68	93.48	20.61

TABLE 20

ANOVA TEST RESULTS DIFFERENTIATING THE ADMINISTRATIVE/ ORGANIZATIONAL STRESS FACTOR MEAN SCORE BY COMMUNITY ENVIRONMENT IN WHICH THE OFFICER SERVES

Source	SS	df	MS	F	p
Between Groups	374.01	2	187.01	.432	.651
Within Groups	28106.97	65	432.41		
Total	28480.98	67			

Null Hypothesis 6 states: There is no relationship between current, perceived physical/psychological threats police stress and the following demographic variables: age, years of law enforcement experience, years of education, religious affiliation, frequency of religious service attendance, and the type of community environment in which the officer serves.

Table 21 presents the correlations among the current, perceived physical/ psychological threats stress factor score, age, years of law enforcement experience, and years of education. The correlation coefficient between the physical/psychological threats stress factor score and age ($r = -.153$, $p > .05$), years of law enforcement experience ($r = -.129$, $p > .05$), and years of education ($r = .207$, $p > .05$) was negligible and not significant. This result indicated that there was no significant relationship between physical/psychological threats police stress, age, years of law enforcement experience, and years of education. Hence, stress associated with the physical and psychological threats in policing was not associated with an officer's age, years of law enforcement experience, and years of education.

A Spearman Rho correlational analysis was performed among the current, perceived physical/psychological threats stress factor score and frequency of church attendance. The correlation coefficient between the physical/psychological threats stress factor score and frequency of church attendance ($r = .068$, $p > .05$) was negligible and not significant. This result indicated that there was no relationship between physical/ psychological threats stress and frequency of church attendance. Hence, stress associated

TABLE 21

CORRELATION FOR PHYSICAL/PSYCHOLOGICAL THREATS STRESS FACTOR SCORE, AGE, YEARS OF LAW ENFORCEMENT EXPERIENCE, AND YEARS OF EDUCATION

Variables	M	SD	1	2	3	4
1. Physical/Psychological Threats	70.41	14.98	1.000			
2. Age	34.99	7.87	-.153	1.000		
3. Years of Law Enforcement Experience	11.42	8.36	-.129	.927*	1.000	
4. Years of Education	14.61	1.48	.207	-.301*	-.272*	1.000

Note. $N = 71$.
*$p < .05$.

with the physical and psychological threats in policing was not related to how often an officer attends religious services.

Tables 22 through 25 present the results of the ANOVA used to analyze the relationship between physical/psychological threats stress factor score and religious affiliation and the community environment. Table 22 shows the mean scores of four religious affiliation groups for physical/psychological threats stress. It ranges from a low of 70.8 for officers claiming no religious affiliation to a high of 80.3 for those with religious affiliations other than Catholics or Protestants. As Table 23 suggests, no significant differences in physical/psychological threats stress were found for the four groups of police officers ($F(3, 67) = 2.033$, $p > .05$). Table 24 shows the mean scores of three community environment groups for physical/psychological threats stress. It ranges from a low of 70.1 for officers working in a suburban environment to a high of 72.6 for those working in an urban environment. As Table 25 suggests, no significant differences

in physical/psychological threats stress were found for the three groups of police officers ($F(2,67) = .165$, $p > .05$). These findings would suggest that an officer's religious affiliation and the community environment in which he or she works was not associated with his or her current perception of the physical and psychological threats stress in policing. Thus, Hypothesis 6 was retained.

TABLE 22

MEANS AND STANDARD DEVIATIONS FOR PHYSICAL/ PSYCHOLOGICAL THREATS STRESS FACTOR MEAN SCORE BY RELIGIOUS AFFILIATION

Religious Affiliation Groups	N	M	SD
1. None	10	70.80	17.21
2. Catholic	19	70.26	17.07
3. Protestant	32	67.28	12.91
4. Other	10	80.30	12.17
Total	71	70.41	14.98

TABLE 23

ANOVA TEST RESULTS DIFFERENTIATING THE PHYSICAL/ PSYCHOLOGICAL THREATS STRESS FACTOR MEAN SCORE BY RELIGIOUS AFFILIATION

Source	SS	df	MS	F	p
Between Groups	1293.30	3	431.10	2.033	.122
Within Groups	14417.85	67	215.19		
Total	15711.15	70			

TABLE 24

MEANS AND STANDARD DEVIATIONS FOR PHYSICAL/ PSYCHOLOGICAL THREATS STRESS FACTOR MEAN SCORE BY COMMUNITY ENVIRONMENT IN WHICH THE OFFICER SERVES

Community Environment Groups	N	M	SD
1. Urban	22	72.55	11.73
2. Suburban	23	70.13	15.23
3. Rural	23	70.65	16.89
Total	68	71.09	14.63

TABLE 25

ANOVA TEST RESULTS DIFFERENTIATING THE PHYSICAL/PSYCHOLOGICAL THREATS STRESS FACTOR MEAN SCORE BY COMMUNITY ENVIRONMENT IN WHICH THE OFFICER SERVES

Source	SS	df	MS	F	p
Between Groups	72.19	2	36.09	.165	.849
Within Groups	14263.28	65	219.43		
Total	14335.47	67			

Summary

This chapter has presented the general characteristics of the study population, descriptive results of the data, and the results of the hypothesis testing. The study examined the relationship between the levels of current, perceived stress and moral reasoning, coping style, and selected demographic variables among 71 duly sworn, full-time, certified Michigan police officers in the Tri-County (Berrien, Cass, and Van Buren counties) area.

This study was comprised of six hypotheses that were based on three research questions. Each hypothesis was tested at the .05 level of significance. All six hypotheses were retained.

For Hypotheses 1 and 2, the correlation coefficient between the administrative/ organizational and the physical/psychological threats stress scores and moral reasoning was not significant. No significant relationships were found between the administrative/organizational and physical/psychological threats stress scores and coping style for Hypotheses 3 and 4.

For Hypothesis 5, the correlation coefficient between the administrative/ organizational stress factor score and age, years of law enforcement experience, and years of education was negligible and not significant. No significant relationship was found between administrative/organizational stress and frequency of church attendance. There was no significant difference of variability between administrative/organizational stress and the four religious affiliation groups and the three community environment groups in which the officer serves.

For Hypothesis 6, the correlation coefficient between the physical/psychological threats stress factor score and age, years of law enforcement experience, and years of education was negligible and not significant. No significant relationship was found between physical/psychological threats stress and frequency of church attendance. There was no significant difference of variability between the physical/psychological stress factor mean and the means of the four religious affiliation groups and the means of the three community environment groups in which the officer serves.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This chapter is divided into several sections. The first section summarizes the statement of the problem, the purpose of the study, the literature review, and the methodology. The second section summarizes and discusses the findings of the study and interpretation. The final section includes conclusions and implications, as well as recommendations for application and further research based on the findings of the study.

Summary

Statement of the Problem

Over the past several decades, research has provided information on stress as it relates to law enforcement, especially in the realm of police personality and coping strategies. However, there is no research on how the variable of moral reasoning relates to police stress and coping. It is reasonable to assume that police officers who experience higher levels of stress will tend to exhibit either a higher or lower level of moral reasoning depending on their perception of a police-related stressor. Furthermore, these factors combined will prompt the officer to use either a more problem-focused or emotion-focused coping strategy in order to reduce stress.

Purpose of the Study

The purpose of this study was to examine the relationship between stress as it

relates to policing and moral reasoning, coping mechanisms, and selected demographic variables in a population of full-time M.L.E.O.T.C. or M.C.O.L.E.S. certified police officers in Berrien, Cass, and Van Buren counties (Tri-County area). The study also investigated whether police stress could be predicted from moral reasoning, coping response style, age, years of police experience, level of education, religious affiliation, frequency of religious service attendance, and the community environment in which the officer is assigned.

Overview of Related Literature

Literature pertinent to this study was reviewed in six sections. First, stress and its relationship to police officers was addressed. The next section explored briefly an overview of moral development. Moral reasoning and law enforcement were discussed, as well as stress and its effects on moral reasoning. Stress and coping among police officers was explored. Finally, police stress and its relationship to the use of either emotion-focused or problem-focused coping by officers were reviewed.

Stress and Police Officers

The present literature supports the concept that police officers are exposed to various stressors within police work. Numerous police-related stressors have been categorized in general as either administrative or inherent to police work itself. These two categories of police stressors have been identified by such researchers as Martelli et al. (1989) and Spielberger et al. (1981) as the most stressful among law enforcement officers. Research has also indicated that police stress can affect coping style, job

performance, marriage and family, and physical and mental well-being. Shift-work, age, years of education and law enforcement experience, community type, gender, and ethnicity are linked to stress within policing.

Brief Overview of Moral Development

The majority of moral development research has been greatly influenced by the pioneering work of Piaget and Kohlberg. These two researchers have advanced the concept that a person's perceptions of reality are cognitively constructed and that the cognitive structures which underlie moral thought progress through developmental stages. However, critical researchers have suggested that moral development is also related to culture, religion, gender, socialization, emotion, and environment. As a result, James Rest developed the Defining Issues Test (DIT) that measures a person's moral understanding as it develops over time; evolving from simpler to more complex ideas through six stage schemes. Recently, Rest et al. (1999) posited that moral decision-making and behavior is a product of four internal psychological processes: moral sensitivity, moral judgment, moral motivation, and moral character.

Police and Moral Reasoning

In general, moral ethics are an important guide for the behaviors of police officers. Police officers also represent a diversity of cultural and religious backgrounds. No research studies that examined the moral reasoning of police officers could be located. However, several studies alluded to moral reasoning in relation to the police role in terms of an ethic of care and justice, and how possessing high moral standards is

interpreted cognitively in terms of personal responsibility for harm to self and others (Aardema et al., 1997; White & Manolis, 1997).

Stress and Moral Reasoning

At present, I could not locate any relevant studies that examined the relationship between police stress and moral reasoning. However, several research studies have examined the relationship between combat stress and moral development. Berg et al. (1994) suggested that high moral development increases the severity of PTSD symptoms from exposure to mild/moderate combat, while the severity of PTSD is highly dependent on combat intensity. Williams (1987) and Violanti (1996b) have argued that police work and military combat share similar conditions and outcomes such as an unknown enemy, a continued sense of insecurity, lack of public support, observing abusive violence, and depersonalization. Research has also indicated that moral reasoning is associated with ethics-induced stress in public organizations, especially when an individual's standards differ from the ethical standards of the organization in which he or she is employed (Menzel, 1993).

Stress and Coping Among Police Officers

Research studies have found that police officers utilize a variety of coping mechanisms in order to reduce the effects of stress and anxiety related to police work. The most common coping strategies used by police officers include cynicism, aggressive and deviant behaviors, suspiciousness, hypervigilance, depersonalization, substance abuse, suicide, and increased risk-taking behaviors. The underlying assumption for the

use of certain coping styles by police officers is based on the cognitive-phenomenological theory of psychological stress developed by Richard Lazarus and his colleagues. Folkman and Lazarus (1980) viewed coping as a process that served two primary functions: the management of the person-environment relationship that is the source of stress (problem-focused coping) and the regulation of stressful emotions (emotion-focused coping).

Police Stress and Emotion-Focused and Problem-Focused Coping

Several studies have demonstrated that coping is a complex process that can involve the simultaneous use of several strategies by police officers when under stress. Problem-focused coping has been found to contribute to an increase in police uplifts (positive work experiences), which in turn contributes to higher levels of well-being (Hart et al., 1995). Researchers have also demonstrated that police officers generally use problem-focused and emotion-focused coping strategies together but tend to use problem-focused coping more often. This coincides with Lanagan-Fox et al. (1997) research findings that indicate that police officers employ problem-focused, direct-action coping strategies but may not deal effectively with their emotion-focused concerns.

Methodology

This correlational study, which used a survey research method, was undertaken to investigate the extent of the relationship between police stress and moral reasoning, coping mechanisms, and selected demographic variables (age, years of law enforcement experience, years of education, religious affiliation, frequency of church attendance, and

the community environment in which the officer serves) among a population of police officers within the Tri-County area using a demographic questionnaire, the Police Stress Survey (PSS), the Defining Issues Test (DIT), and the Coping Response Inventory (CRI). The demographic questionnaire was used to collect information on gender, ethnicity, years of law enforcement experience, education level, type of law enforcement agency, present work assignment, type of community mostly served, current rank/job title, shift hours and rotation schedule, marital status, age, religious affiliation, and frequency of church participation.

The PSS, which was developed by Spielberger, Westberry, Grier, and Greenfield (1981), was used for the purposes of identifying and accessing job-related events and situations that are considered stressful by police officers. The PSS consisted of 60 items that contains two subscales that measure Administrative/Organizational Pressure and Physical/Psychological Threats stressors. This instrument has been used predominately with police populations.

The DIT, which was based on Kohlberg's moral development theory, was developed by James Rest and used to measure moral judgment at Stages 2 through 6. This instrument consists of six moral dilemmas concerning social issues, with each dilemma being followed by 12 related considerations in the form of questions or statements. Each of the considerations characterized a particular stage of moral reasoning. The DIT has been used extensively among various educational, religious, and work populations and has been found to be a very reliable and valid measure of general moral judgment.

Hart developed the CRI, which consist of 24 items, for the purpose of measuring the coping strategies used by police officers. This instrument consists of two subscales that assess the implementation of Problem-Focused or Emotion-Focused coping strategies. The CRI has been widely used with law enforcement and college populations.

The subjects who volunteered to participate in this study were 71 full-time M.L.E.O.T.C. or M.C.O.L.E.S. certified law enforcement officers, representing 28 police agencies within the Tri-County area. They included 62 Caucasians, 2 African Americans, 2 Hispanic/Latinos, 1 Native/Alaskan American, and 4 who did not identify their ethnicity. Initially, 41 law enforcement agencies, representing 488 police officers were asked to participate in the study, of which 28 agencies representing 357 police officers took part. There were 105 police officers who returned the questionnaires, of which 34 of these subjects returned invalid questionnaires, thus the resulting N was 71. These officers represented a diversity of educational and religious backgrounds, years of law enforcement experience, age, work assignments, and job titles. They were encouraged to complete the questionnaires honestly.

From the sample population there were 31 police officers/patrolmen/ patrolwomen, 10 Sheriff deputies, and 13 State Troopers. The data were collected and analyzed with respect to the Administrative/Organizational Pressure and Physical/Psychological Threats stressor subscales on the PSS, the P score on the DIT, the Problem-Focused and Emotion-Focused coping subscales on the CRI, and the demographic data for the entire sample. Data analysis was conducted by using bivariate correlations for Hypotheses 1-4 pertaining to the relationship of police stress with the

level of moral reasoning, and coping style. For Hypotheses 5 and 6, bivariate correlations was used to examine the relationship of police stress with age, years of law enforcement experience, and years of education, while the Spearman Rho analysis was used to examine the relationship of police stress with frequency of church attendance. The remaining segment of Hypotheses 5 and 6 used an ANOVA with post hoc tests to examine the variability of police stress with religious affiliation and the community environment in which the officer serves.

Findings of the Study

The findings of this study are summarized and discussed according to the descriptive results and six null hypotheses that were formulated and tested based on three research questions.

Descriptive Results

An analysis of the 60 items that addressed the ranking of police stressors revealed important findings in the current study. Of the top 10 stressors, six were common to the physical/psychological threats stress of policing, while four were common to administrative/organizational stress. Of the top 10 least severe stressors, five were physical/psychological threats stressors, four were administrative/organizational pressure stressors, and one focused on working a secondary job. In comparing these stressors with the research findings of Spielberger et al. (1981), it was interesting to observe that several of these top stressors have remained but have changed in their ranking.

In this study, police subjects identified three top stressors: killing someone in the

line of duty, a fellow officer killed in the line of duty, and exposure to battered or dead children. This is consistent with the research findings of Boyd (1994), Spielberger et al. (1981), and Violanti and Aron (1994) which indicated that these three stressors are the three most prominent physical/psychological threats stressors that law enforcement officers encounter within police agencies. This finding was interesting in that these three chief physical/psychological threats stressors appear to be consistent regardless of time and location. Each of these previous studies were conducted with officers from different police agencies. Also, a significant amount of time has elapsed since the time of the present study and the times when these previous studies were conducted. One possible explanation for the present finding is that police officers in general are a more homogeneous population. This may suggest that the perception of these top three physical/psychological threats stressors found among Tri-County police subjects in the present study may also be perceived similarly by other police officers in other agencies. Another possible explanation is that police subjects in the current study are highly concerned about the potential physical and psychological risks associated with these three stressors and/or may have been personally affected by these stressors to some degree (Violanti, 1996a). I tend to believe that both explanations are relevant to this finding.

In the current study police subjects indicated that the top two administrative/ organizational stressors were inadequate support by the department and inadequate support by supervisor. The first finding is consistent with Violanti and Aron (1994) who found that this particular stressor was one of the highest ranked organizational stressors among police officers, while support for the second finding comes from the research of

Kroes (1985) and Stratton (1985) who indicated that this particular stressor is a very common stressor that is precipitated within the police organization. Officers in the present study indicated that the lack of support from their administration and supervisors produces stress for them. A major explanation for the present finding is based on the officers who participated in the study. In fact, 54% of these officers listed specific organizational stressors that cause them continual problems. Some of these stressors included: problems with the quality of supervision they receive, restrictive policies, administrators who are out of touch, unfair disciplinary practices, and inadequate promotional and training opportunities. Another key reason for this finding may suggest that police organizations and supervisory personnel in the Tri-County area are not proactive in developing and implementing practices that help to reduce this perception among their officers.

The results of a crosstabulation analysis that compared administrative stress with physical/psychological threats stress in policing showed that police subjects in the present study experience both types of police stress. Stratton (1984), Kroes (1985), and Fin and Tomz (1997) have categorized various police stressors within several domains, including organizational stress and physical/ psychological threats stress. Research has indicated that these two categories are considered by police officers as the most bothersome (Spielberger et al., 1981; Martelli et al, 1989; Violanti, 1996a).

The present study indicated that 54% of police subjects listed administrative/ organizational pressure as being more of a major hassle or problem than other police stress related categories for the past six months. This finding is consistent with research

conducted by Patterson (1999) who found that the majority of officers in his study chose an organizational event as the most meaningful occupational event that occurred within the previous six months. Spielberger et al. (1981), Martelli et al. (1989), and Violanti and Aron (1993) have also indicated that organizational stressors are considered by officers as more stressful than the physical and psychological dangers of policing.

In the area of how police subjects felt about their specific job related hassle or problem, 86% of officers in the current study considered their specific problem as bothersome, 70% felt that they had no control over the problem, 83% believed that it was important to cope effectively with it, 57% felt that they coped well with the problem, and 46% felt that their specific problem was still affecting them to some degree. This finding seems contrary to research which suggests that officers occasionally cause problems for themselves due to their perceived appraisal strategies (Violanti, 1996a). The present finding may suggest that police subjects in the Tri-County area are aware of their own feelings and anxieties about job-related stressors and have implemented a coping strategy that helps to manage their stress effectively.

The current study indicated that 59% of police subjects from the Tri-County area use an average level of moral reasoning when confronted with moral dilemmas. To some degree this finding should not be surprising since 40 of the 71 police subjects had either an Associate's Degree or some college or a high school education. Research conducted by Rest (1979, 1986a) has indicated that more complex stages of moral development are often observed in individuals with advanced education.

What was interesting is that 32% of police officers in the current study fell well

below the adult norm and slightly higher than the norm for senior high students in moral reasoning. There are no normed data on police officers and moral reasoning that would provide insight for the present finding. However, Blau (1994) indicated that police officers tend to assimilate a mode of dichotomized decision making with no discretionary middle ground. This type of thinking is a common trait of the police role (Violanti, 1999) and may contribute to the limited use of the moral reasoning process in the law enforcement context.

Also, Lerner (1976) has indicated that the majority of people use primarily Stage 4 (law and duty to social order) moral reasoning. Individuals who work in law enforcement are engaged in activities that encourage using this type of reasoning. This may reflect the complex system of beliefs and values, which constitute the organizational culture that can strongly influence officer perception (Paton & Smith, 1999).

In the present study the results of a crosstabulation analysis that compared problem-focused coping with emotion-focused coping indicated that officers use both forms of coping to manage stressful events, with a slight slant (35%) towards incorporating a more problem-focused coping process. This finding is supported by Hart et al. (1995) who indicated that police officers tend to use both forms of coping to manage stressful events.

The present study indicated that over a third of police subjects tend to use more problem-focused coping strategies to manage their stress. Research conducted by Biggam et al. (1997) and Lanagan-Fox (1997) indicated that police officers tend to use more problem-focused coping strategies to manage stressful events.

The downfall associated with the exclusive use of problem-focused coping by officers is that they continue to use such mechanisms within situations that may require the use of more emotion-focused coping mechanisms to help reduce stress (Evans et al., 1993). Typically, these situations or events often involve interpersonal relationships outside of law enforcement. The problem-focused method of coping that works well for officers on the job does not always work successfully at home. This may be due to the officer's need to maintain a sense of control and predictability under stressful conditions. Martial, family, and other close social relationships are more complex and require a higher degree of flexibility, patience, and consistent social and emotional support then the human contacts that officers encounter while on duty.

Research Question 1

What are the levels of police stress in a sample of police officers? This question was answered by observing the distribution of officers among four stress level categories.

The present study found that 88% of police subjects considered police stress moderately stressful. Previous literature has indicated that law enforcement is a highly stressful profession (Terry, 1983). Police officers are often involved with numerous critical incidents and the impact of these incidents produce high levels of stress that adversely affect them psychologically, socially, and emotionally (Nielson, 1986). Furthermore, organizational and interdepartmental practices are a continuous source of distress in policing (Violanti, 1996a). Therefore, I hypothesized that police subjects in the present study would exhibit a high level of police stress. The present study's finding did not support this hypothesis.

There may be several reasons for this particular finding. First, the police subjects in this study work in communities where the exposure to potentially dangerous and severe critical situations and events occur less frequently. For instance, during 1999, Tri-County police agencies indicated a index crime (i.e., murder, rape, robbery, and aggravated assault) rate of 4,040 per 100,000 compared to the City of Detroit which indicated a index crime rate of 10,086 per 100,000 (Michigan Uniform Crime Report, 1999).

Second, many of the police subjects in the current study come from small police agencies (less than 25 officers) where the paramilitary structure is less rigid and the opportunity to implement organizational practices which produce minimal distress are more probable. Furthermore, the police subjects from these smaller agencies are more likely to have a considerable amount of autonomy and responsibility. They often work alone or with several other officers and may not have immediate access to a shift supervisor (i.e., sergeant or lieutenant).

Finally, 83% of the police subjects in the present study indicated that they felt it was important to manage their police related stressors effectively. Over half also indicated that they felt that they were able to cope well with their police related stressors. Research has indicated that individuals learn to appraise their stressors in a manner that allows them to determine the extent to which stressful events will have on their well-being (Lazarus & Folkman, 1984). The present study's finding may reflect this process.

Research Question 2

Is police stress related to moral reasoning and coping style in a sample of police

officers? This question was answered by using bivariate correlational analyses. This research question is stated in the null form for Hypotheses 1-4.

Hypothesis 1. There is no relationship between current, perceived administrative/organizational police stress and moral reasoning.

This hypothesis was retained. The present study found no significant correlation between administrative/organizational stress and moral reasoning. This result suggests that the officer's level of police stress related to administrative/organizational pressure does not seem to influence his or her degree of moral reasoning.

Since present literature provided no relevant studies that examined this relationship, a conceptual hypothesis was developed based on several assumptions. First, moral reasoning is a developmental process that is based on one's level of cognitive development (Rest, 1979). A fundamental tenet of this process is that a person's perceptions of reality are cognitively constructed and tend to develop in complexity as a person's experiences accumulate. Since police stress is based on an officer's cognitively constructed perceptions of occupational experiences (Lauferweiler, 1995; Violanti, 1981) it was reasonable to assume that these constructs would affect moral reasoning.

Second, individuals who enter into policing begin a process of assimilation into the police role where adhering to an established hierarchy and following orders are standard operating procedures. Throughout the assimilation process, police organizations use a strong mixture of militaristic and bureaucratic control methods to coerce officers to behave and reason in a manner consistent with the police role (Violanti, 1999). As a result, a common trait of the police role is the use of a dichotomized decision making

process (the situation is either right or wrong) to resolve problems (Blau, 1994). Thus, I believed that officers who tend to incorporate a high level of moral reasoning would have difficulty adjusting to the organizational structure and police role. These officers would perceive organizational stress as high.

Based on these assumptions, I hypothesized that organizational stress was related to moral reasoning. Specifically, officers with a high level of organizational stress would have a high level of moral reasoning, whereas, officers with a low level of organizational stress would have a low level of moral reasoning. The present study's finding did not support this hypothesis. There are several possible explanations for this finding.

First, organizational stress and moral reasoning are two constructs that may not be related conceptually, even though they share some aspects related to cognitive development. This explanation was supported by the results of a bivariate correlational analysis that indicated no relationship between these two variables.

Second, the paramilitary structure of law enforcement agencies and police role may have contributed to the present findings. Law enforcement organizations select and train officers who are more likely to adhere to an established hierarchy and assimilate into the police role. This process begins early in police training and is often supported by the police subculture (Violanti, 1999). Officers who have difficulty adapting to this structure and role are usually weeded-out during the initial academy training or probationary process.

Finally, it is more likely that individuals who use a high level of moral reasoning choose other professions that are more conducive to this type of reasoning. The rigid

structure and assimilation process into the police role limits the use of higher moral reasoning processes that would result in experiencing higher organizational stress. This explanation seems to be supported by the findings of the present study which indicated that a large number of police subjects fell in the low-moderate category for organizational stress and fell in the low to middle level of moral reasoning.

Hypothesis 2. There is no relationship between current, perceived physical/psychological threats police stress and moral reasoning.

This hypothesis was retained. The present study found no significant correlation between physical/psychological threats stress and moral reasoning. This would seem to suggest that stress associated with the physical and psychological threats in police work was not related to an officer's level of moral reasoning.

Since the present literature provided no relevant studies that examined this relationship, a conceptual hypothesis was developed based on several assumptions. First, researchers such as Violanti (1996b, 1999) and Williams (1987) have suggested that while police officers are not engaged in military combat, they do tend to experience similar conditions and outcomes. This includes a continued sense of danger from an unknown enemy, witnessing violence and death, depersonalization of emotion, lack of public support, increased risk of suicide, substance abuse, and disrupted family life (Violanti, 1996b, 1999). In fact, Williams (1987) depicted police officers as engaging in peacetime combat that can result in great psychological distress.

A second assumption was based on research involving wartime soldiers. Several studies have indicated that Post-traumatic Stress Disorder (PTSD) was related to a

soldier's level of moral development depending on the amount of combat exposure (Berg et al., 1994; Jackson, 1982; Wilson, 1978).

Based on these assumptions I hypothesized that the physical and psychological threats of policing would be related to an officer's level of moral reasoning. Specifically, I hypothesized that officers with a high level of moral reasoning would exhibit a high level of physical/psychological threats stress compared to officers with a low level of moral reasoning. The present study did not support this hypothesis. There are several possible explanations for this finding.

First, physical/psychological threats stress and moral reasoning are two constructs that may not be related conceptually, even though they share some aspects related to cognitive development. This reason was strongly supported by the results of a bivariate correlational analysis that indicated no relationship between these two variables.

A second possible explanation concerns the environment of the police subjects. As stated earlier, the police subjects in this study work in communities where the exposure to potentially dangerous and severe critical situations and events occur less frequently. In fact, the current study indicated that 59% of Tri-County subjects fell in the middle range of moral reasoning and 88% fell within the moderate level of physical/ psychological threats stress. This would imply that moral reasoning and the level of physical/psychological stress are related. However, this explanation was not substantiated by the results of a bivariate correlational analysis that indicated no relationship between these two variables.

Third, Kohlberg (1984) hypothesized that individuals with intermediate levels of

morality--ones that emphasize duty to society--are suited for combat behaviors. Police officers work within an environment that encourages the use of more Stage 4 reasoning (belief that everyone is obligated and protected by the law) than postconventional reasoning (belief that everyone is obligated by shareable social ideas). In addition, commenting on Kohlberg's hypothesis, Berg et al. (1994) believed that individuals who function at either a much higher or a much lower level of moral development may have more severe emotional reactions to combat than those in an intermediate range. This would imply that moral reasoning and the level of physical/psychological threats stress would be related. Unfortunately, this explanation was not supported by the results of a bivariate correlational analysis that indicated no relationship between these two variables.

Finally, it is possible that the previous law enforcement training police subjects received may have also contributed to the present study's finding. The present study indicated that many of the police subjects operate in the moderate level of moral reasoning. As Kohlberg (1984) suggested, individuals who operate at this level of moral reasoning are more suited for combat behaviors. In general, police officers are constantly trained to mentally and physically anticipate and control various critical incident scenarios. Officers who fail to think and behave in a manner consistent with their training place themselves at risk for serious physical, civil, and/or legal consequences.

Hypothesis 3. There is no relationship between current, perceived administrative/organizational police stress and coping styles.

This hypothesis was retained. The present study found no significant correlation between administrative/organizational stress and problem-focused and emotion-focused

coping. This result would seem to suggest that administrative and organizational stress in policing was not related to an officer's use of either a more problem-focused or emotion-focused style of coping.

Previous research has indicated that police officers tend to use more problem-focused forms of coping in order to deal with police stress (Biggam et al., 1997; Evans et al., 1993; Hart et al., 1995). Research by Patterson (1999) has further indicated that emotion-focused and social support coping strategies resulted in higher levels of distress.

Another assumption focused on the notion that the majority of police officers view themselves as problem solvers. Stratton (1984) has suggested that this approach is conducive to good police work but does not lend itself well to managing stress.

Based on these assumptions, I hypothesized that administrative/organizational stress was related to coping. Specifically, police subjects who had a low level of organizational stress tend to use more problem-focused coping, whereas, police subjects who had a high level of organizational stress tend to use more emotion-focused coping. This hypothesis was not supported by the data from the present study. There may be several reasons for the present finding.

First, the present study found that police subjects use both problem- and emotion-focused forms of coping to deal with police stress with a slightly higher number of police subjects using more problem-focused coping strategies. The current study also indicated that 87% of police subjects fell in the low-moderate range of administrative/ organizational stress. Some support for these findings comes from a study conducted by Patterson (1999) which indicated that the use of problem-focused strategies by police

subjects resulted in lower levels of distress, although the relationship was not significant.

Another explanation comes from the findings of the present study. The study indicated that out of the 70 police subjects responding to five affective content items on the CRI, 58 considered it important to cope effectively with their specific problem or hassle and 40 felt that they were able to cope with it even though 49 believed that they had no control over it. These findings would suggest that many of the police subjects in the present study are able to manage their organizational stress effectively. However, the results of a bivariate correlational analysis indicated no relationship between coping style and the level of administrative/organizational stress.

Hypothesis 4. There is no relationship between current, perceived physical/psychological threats police stress and coping styles.

This hypothesis was retained. The present study found no significant correlation between physical/psychological threats stress and problem-focused and emotion-focused coping. This finding would seem to suggest that stress associated with the physical and psychological dangers in policing was not related to an officer's use of either a more problem-focused or emotion-focused style of coping.

As stated earlier, previous literature has indicated that police officers tend to use more problem-focused forms of coping in order to deal with police stress (Biggam et al., 1997; Evans et al., 1993; Hart et al., 1995). Furthermore, the use of more emotion-focused forms of coping to manage stress tends to cause higher levels of distress (Patterson, 1999).

Based on these assumptions, I hypothesized that physical/psychological threats

stress was related to coping. Specifically, police subjects who had a low level of physical and psychological threats stress tend to use more problem-focused coping, whereas, police subjects who had a high level of physical and psychological threats stress tend to use more emotion-focused coping. This hypothesis was not supported by the data from the present study. There may be several reasons for the present finding.

First, the present study found that police subjects use both problem- and emotion-focused forms of coping to deal with police stress with a slightly higher number of police subjects using more problem-focused coping strategies. The current study also indicated that a large number of police subjects (88%) fell in the moderate range of physical/ psychological threats stress. Again, some support for these findings comes in a study conducted by Patterson (1999) which indicated that the use of problem-focused strategies by police subjects resulted in lower levels of distress, although the relationship was not significant.

Second, the present study provided some insight concerning these findings. The study indicated that out of the 70 police subjects responding to five affective content items on the CRI, 58 considered it important to cope effectively with their specific problem or hassle and 40 felt that they were able to cope with it even though 49 believed that they had no control over it. These findings would suggest that many of the police subjects in the present study are able to manage their physical/psychological threats stress effectively. However, the results of a bivariate correlational analysis indicated no relationship between coping style and the level of physical/psychological threats stress.

A final explanation may involve the context of the work environment.

Specifically, Paton and Smith (1999) have suggested that the organizational environment defines the context within both traumatic experiences and recovery will occur. In general, the police organization and subculture incorporates a belief system that emphasizes strength and control, regardless of the nature of the critical incident. Failure to manage stress effectively demonstrates a sign of weakness, mistrust, and lack of dependability. Therefore, the present finding may be a reflection of this underlying belief system in Tri-County police subjects.

The findings of Hypotheses 1-4 provided no support for the conceptual model that I proposed earlier. Figure 3 presents the findings of the proposed hypothesis. The results of this study demonstrated no significant relationship between police stress, moral reasoning, and coping mechanisms among police subjects in the Tri-County area. This finding was surprising because based on previous studies (Biggam et al., 1997; Evans et al., 1993; Hart et al., 1995) police officers tend to use more problem-focused coping strategies to manage stressful events. In some respects, this finding may suggest that police officers are able to effectively manage their stress inherent to police work itself as well as stress precipitated by the department. This is substantiated by the distribution of subjects among the study's stress levels. Eighty-eight percent of police subjects were in the moderate range of police stress. In addition, over half of the subjects felt that it was important to deal effectively with their police related problems or hassles and managed to effectively cope with them despite feeling that they were extremely bothersome and uncontrollable.

Figure 3 further indicates that police stress was not significantly related to moral

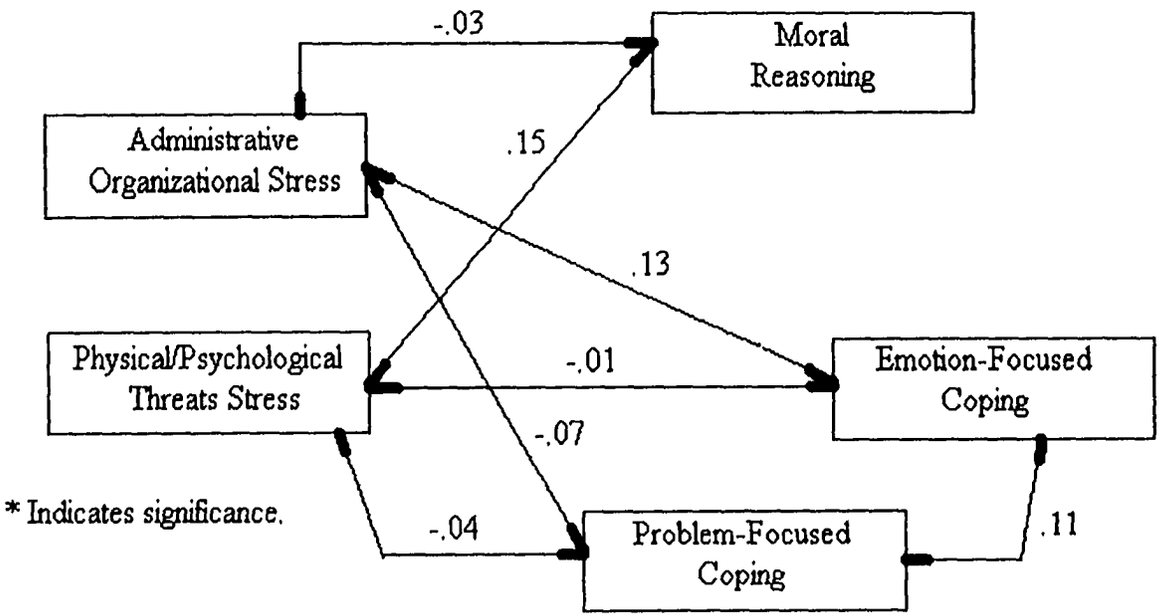

Figure 3. Pearson-product moment correlations: The relationship between police stress (administrative/organizational stress and physical/psychological threats stress) and moral reasoning, problem-focused coping, and emotion-focused coping.

reasoning. This finding points to the need for further research in this particular area. Several possible reasons were stated earlier in order to explain the present study's findings in this area. However, based on the results of bivariate correlational analyses that examined these variables, I tend to ascribe to the notion that these variables are constructs that are not related.

Research Question 3

Can police stress be predicted from moral reasoning, coping mechanism and other demographic variables? This question was answered using bivariate correlational, Spearman Rho, and ANOVA analyses. This question is stated in the null form in Hypotheses 5 and 6.

Hypothesis 5. There is no relationship between current, perceived administrative/organizational police stress and the following demographic variables: age, years of law enforcement experience, years of education, religious affiliation, frequency of religious service attendance, and the type of community environment in which the officer serves.

This hypothesis was retained. Through the use of the Pearson product-moment analysis, the present study found no significant correlation between administrative/ organizational stress and age, years of law enforcement experience, and years of education. This finding suggests that stress related to administrative/organizational pressures in policing was not associated with an officer's age, years of law enforcement experience, or years of education.

Through the Spearman Rho analysis, the present study found no significant

correlation between administrative/organizational stress and frequency of church of attendance. This finding would seem to suggest that administrative and organizational stress in policing was not related to how often an officer attends religious services.

Through the ANOVA with post hoc tests, the present study found no significant variability between administrative/organizational stress and the four religious affiliation groups and the three community environment groups in which the officer serves. This finding suggests that an officer's religious affiliation and the community environment in which he or she works was not related to his or her current perception of administrative/organizational stress in police work.

Hypothesis 6. There is no relationship between current, perceived physical/psychological threats police stress and the following demographic variables: age, years of law enforcement experience, years of education, religious affiliation, frequency of religious service attendance, and the type of community environment in which the officer serves.

This hypothesis was retained. Through the use of the Pearson product-moment analysis, the present study found no significant correlation between physical/ psychological threats stress and age, years of law enforcement experience, and years of education. This finding would seem to suggest that stress related to the physical and psychological dangers in policing was not associated with an officer's age, years of law enforcement experience, and years of education.

Through the Spearman Rho analysis, the present study found no significant correlation between physical/psychological threats stress and frequency of church

attendance. This finding would seem to suggest that physical/ psychological threats stress in policing was not related to how often an officer attends religious services.

Through the ANOVA with post hoc tests, the present study found no significant variability between physical/psychological threats stress and the four religious affiliation groups and the three community environment groups in which the officer serves. This finding would seem to suggest that an officer's religious affiliation and the community environment in which he or she works was not related to his or her current perception of stress associated with the physical and psychological dangers in police work.

The findings from Hypotheses 5 and 6 were puzzling. As far as years of law enforcement experience, previous research studies conducted by Burke (1989a, 1989b) and Violanti (1983) have indicated that stress is correlated with years of law enforcement experience. Police stress tended to increase during the first 13 years of experience and then declined. Therefore, I hypothesized that police subjects with 13 years of police experience would exhibit higher levels of stress than police subjects with more than 13 years of experience. The data from the present study did not support this hypothesis.

One possible explanation for the present study's finding comes from the research of Boyd (1994) who found that stress in policing was perceived at its highest during the 6^{th} and 7^{th} year of service and would not reach those heights again until the 18^{th} and 19^{th} year of service. The present study indicated that the mean number of years of law enforcement experience for police subjects was 11. Furthermore, the present study found that a large number of police subjects (88%) in the Tri-County area fell in the moderate range of police stress.

Another possible explanation concerns the fluctuating nature of policing. Police work is in a constant state of change. As a result, the officers' perceptions of hazards and the risk they pose will change over time as a result of training, experience, new safety equipment, and administrative changes (Paton and Smith, 1999).

For the variable of age, research by Mayes et al. (1991) indicated that age moderated the effects of job stressors and physical and psychological strains. Therefore, I hypothesized that younger police subjects would have higher levels of police stress than their older counterparts. The present study's findings did not support this hypothesis.

A possible explanation for this finding is that age is not related to police stress. This explanation was substantiated by the results of a bivariate correlational analysis that indicated no relationship among these variables.

Concerning education, previous research suggested that police officers with more education reported fewer psychosomatic symptoms and negative feeling states (Burke, 1994). Research conducted by Spielberger et al. (1981) further indicated that officers with higher levels of education differed in their rating of job stressors in comparison to officers who had either a high-school diploma or some college. From these studies I hypothesized that police stress was related to the officer's level of education. Specifically, officers with higher levels of education would exhibit lower police stress levels compared to officers with lower education levels who would exhibit higher levels of police stress. This hypothesis was not supported by the data from the present study.

One possible explanation is that these two variables are not related constructs and, therefore, would not exhibit any correlation. This explanation was substantiated by the

results of a bivariate correlational analysis that indicated no relationship among these variables.

Another possible explanation for the present finding suggests that the education level of the police subjects may moderate the effects of police stress. Over half of the police subjects in the current study possessed a college degree. However, a majority of police subjects fell within the moderate range of police stress, thereby limiting the plausibility of this explanation.

The present study found no significant relationship between police stress and four religious affiliation groups (None, Catholic, Protestant, and Other) and frequency of church attendance. Previous research conducted by Holaday et al. (1995) found that some officers rely on spiritual beliefs to assist them in dealing with their emotional distress under stressful events. In the area of combat soldiers, Card (1987) indicated that church-going was associated with a reduced incidence of PTSD in Vietnam veterans. Furthermore, this idea has been somewhat alluded to in the area of moral reasoning. For instance, Ernsberger and Manaster (1981) indicated that both the degree of intrinsic religious orientation and moral stages, which are a normal part of one's religious community, are related to moral development. Rest (1986b) also indicated that religious knowledge correlates significantly with moral reasoning.

Based on these assumptions I believed that one's religious belief system and commitment to spiritual growth would help one to manage stress positively. This led me to hypothesize that police stress would be related to an officer's religious affiliation and frequency of church attendance. Specifically, police subjects who were affiliated with a

religious organization and attended church services regularly would exhibit lower police stress than those who had no religious affiliation. The present data did not support this hypothesis.

A possible explanation concerning this finding is that an officer's religious affiliation and frequency of church attendance is not related to the perception of police stress. This reason is supported by the data from the present study. The majority of police subjects in the present study perceived police stress as moderately stressful and almost half of the police subjects in the present study were either Catholic (19) or had no religious affiliation (10).

The present study did not find a significant relationship between police stress and the type of community environment in which the officer serves. Paton and Smith (1999) indicated that the work environment defines the context within which both traumatic experiences and recovery occur. Spielberger et al. (1981) indicated that the function of location of the police agency influenced police stress ratings. This led me to hypothesize that police stress was related to community environment. Specifically, police subjects from urban areas would have higher levels of stress compared to police subjects from suburban and rural environments. The data from the present study did not support this hypothesis.

A possible explanation for the present finding is that the Tri-County area in which the police sample was drawn is a more suburban-rural environment compared to a larger urban/inner city environment where higher amounts of police stress are expected. As stated earlier, Tri-County officers were exposed to far less index crimes than officers

from the City of Detroit. Furthermore, police organizations in more urban settings tend to adhere to a more rigid and extensive paramilitary structure. However, research by Spielberger et al. (1981) indicated that the location of a police agency seemed to have no effect on stress ratings.

Based on several descriptive variables in this study, I was able to establish a profile of the law enforcement officer that works in the Tri-County area. The law enforcement officer that was employed full-time within the Tri-County area was more likely to be a married white male, around 35 years of age, and have accumulated 11 years of police experience. The officer will more likely possess either an Associate's or Bachelor's Degree, belong to a Protestant church, and may attend a religious service one or more times a month. He will more likely be assigned to perform patrol and traffic duties, and work an 8-hour shift that is permanent (non-rotating). The officer will more likely possess an intermediate level of moral reasoning, considers the physical and psychological dangers and organizational practices moderately stressful, and employs both problem- and emotion-focused coping strategies to handle police stress. In addition, he believes that it is important to cope effectively with the problems or hassles related to policing even though he perceives them as being extremely bothersome and feels that he has no control over them at all. Finally, despite feeling that his work related problems are still affecting him to some degree, the officer believes that he is able to cope well with them.

Conclusions

Based on this study's three research questions several hypotheses were generated.

The first question inquired about the levels of police stress. The study concluded that the majority (88%) of Tri-County police subjects fell within a moderate range of police stress.

One of the purposes of this study was to determine if the perception of police stress was related to the level of moral reasoning and the type of coping style used by police officers in order to manage its effects. The data available in this study concluded that: (1) administrative/organizational pressure stress was not related to moral reasoning; (2) physical/psychological threats stress was not related to moral reasoning; (3) administrative/organizational pressure stress was not related to coping style; and (4) physical/psychological threats stress was not related to coping style. More empirical research is necessary to clarify the relationship between police stress, moral reasoning, and coping.

The third question asked if police stress was related to several demographic variables. The study concluded that police stress was not related to age, years of law enforcement experience, education level, religious affiliation, frequency of church attendance, and the type of community environment in which the officer serves, although three of these independent variables were found to relate to each other significantly.

Recommendations

Based on the findings and conclusions of this study, the following recommendations are suggested for further research:

1. Replication of this study using a larger sample of officers in an urban area to explore if sample size and environment greatly influenced research results

2. Explore more specifically the relationship between police stress and stages of moral reasoning

3. Develop normed data on police officers and moral reasoning

The following recommendations are suggested for law enforcement agencies in order to reduce police related stress:

1. The implementation of a progressive stress management program that addresses stress problems produced by the department and police work itself

2. The implementation of a peer support program

3. The implementation and consistent use of critical incident stress debriefings after traumatic events

4. Review and update departmental policies, procedures, and practices that contribute significantly to organizational stress, especially in the area of providing support to line personnel by administrators and supervisors

5. Implement the use of more psychologists and other mental health workers who are trained to specifically address the stress related needs, problems, and concerns of the law enforcement population

The following recommendations are suggested for psychologists and other mental health professionals in order to build rapport between police and mental health providers and assist police agencies in managing police stress effectively:

1. Provide further empirical research studies that examine and address the needs and concerns of police related stress

2. Extend services to police personnel beyond traditional psychotherapy

practices, e.g., facilitating critical incident stress debriefings for police and other emergency services providers, consult with local police agencies in developing stress management and peer support programs, and conduct stress training workshops and presentations designed for law enforcement personnel

APPENDIX A

LAW ENFORCEMENT CODE OF ETHICS

LAW ENFORCEMENT CODE OF ETHICS

As a law enforcement officer, my fundamental duty is to serve mankind; to safeguard lives and property; to protect the innocent against deception, the weak against oppression or intimidation, and the peaceful against violence or disorder; and to respect the constitutional rights of all persons to liberty, equality and justice.

I will keep my private life unsullied as an example to all; maintain courageous calm in the face of danger, scorn or ridicule; develop self-restraint; and be constantly mindful of the welfare of others. Honest in thought and deed in both my personal and official life, I will be exemplary in obeying the laws of the land and the regulations of my department. Whatever I see or hear of a confidential nature or that is confided to me in my official capacity will be kept ever secret unless revelation is necessary in the performance of my duty.

I will never act officiously or permit personal feelings, prejudices, animosities, or friendships to influence my decisions. With no compromise for crime and with relentless prosecution of criminals, I will enforce the law courteously and appropriately without fear or favor, malice or ill will, never employing unnecessary force or violence, and never accepting gratuities.

I recognize the badge of my office as a symbol of public faith, and I accept it as a public trust to be held so long as I am true to the ethics of police service. I will constantly strive to achieve these objectives and ideals, dedicating myself before God to my chosen profession--**LAW ENFORCEMENT.**

APPENDIX B

LETTERS

Dear Fellow Officer:

My name is Harvey Burnett and I am a doctoral student in the Department of Educational and Counseling Psychology at Andrews University. I am also a police officer with the Buchanan Police Department.

At this time I would like to take this opportunity to thank you for your support and cooperation in a psychological study which focuses on a prevalent concern amongst law enforcement officers: police stress. In particular, this study investigates how police stress is related to an officer's moral values, coping strategies and other variables. The purpose of this research is to obtain data for my doctoral dissertation.

Please understand that your participation in this study is **voluntary**, and the information that you provide will be kept confidential and will not be released to your department's administration. Also, you and your department will not be identified as a participant in this study. The information that you provide will serve as an essential resource in increasing insight into police stress and its affects on police officers. This information will also help in the further development of support programs for law enforcement officers in order to reduce stress related illness, burnout and other related problems.

Along with this cover letter you will find enclosed in this packet a pencil, four questionnaires, a stamped self-addressed return envelope, and a gift. Please read the instructions for each questionnaire carefully and then answer each item honestly. Do not place your name on any of the questionnaires, or on the return envelope, or make any stray marks that could identify you as the respondent. After completing these questionnaires, double check your answers to make sure that you have answered every item. Place the completed questionnaires in the provided stamped self-addressed return envelope and mail. If possible, please return your completed questionnaires by August 7, 1999, or no later than August 14, 1999.

It should take approximately 60 minutes to complete all the questionnaires. You may either complete all the questionnaires at one time or within several settings; whichever is convenient for you. Enclosed is a small gift in appreciation for your participation in this study. Once all the data has been collected and analyzed, an abstract report of my research findings will be provided to your department to post in order for you to review.

If you have any questions, comments or concerns, please feel free to contact me at the Buchanan Police Department at (616) 695-5120, at my home at (616) 695-8319, or my dissertation Chair, Dr. Lenore Brantley at (616) 471-3491. Thank you for your assistance.

Sincerely,

Harvey Burnett
Graduate Student
Department of Educational and Counseling Psychology
Andrews University

Enclosures

Dear Chief/Sheriff/Post Commander:

My name is Harvey Burnett and I am a graduate student at the Department of Educational and Counseling Psychology at Andrews University. I am also a police officer with the Buchanan Police Department.

At this time I am asking for your assistance, cooperation and support in helping me to obtain data for my doctoral dissertation. The psychological study that I am conducting focuses on a prevalent concern for a majority of law enforcement agencies: stress amongst police officers. In particular, this study investigates how police stress is related to an officer's moral values, coping strategies and other variables. The data for this study will be collected from all sworn full-time M.L.E.O.T.C. or C.O.L.E.S. certified officers who are currently or have had previous patrol experience in the Tri-County (Berrien, Cass, and Van Buren counties) area.

I am respectfully requesting your permission for your officers to participate in this research study. All data collected will be kept confidential and no information will be used in this study to identify your agency or its officers as a participant. Based on the compliment of full-time officers employed with your agency, a large packet containing smaller envelopes are to be distributed to each one of your officers through their departmental mailbox. The smaller envelopes contain a cover letter, four questionnaires, a gift and a stamped self-addressed return envelope. It will take approximately 60 minutes to complete the research information. The officers can complete the information either at one time or in several sittings; whichever is convenient for the officer.

The packets will be provided to you in early July, 1999, in order to distribute to your officers. Please note and emphasize to your officers that participation is **voluntary** and will be greatly appreciated. There is no cost to your department or to the officers who agree to participate in this study. Furthermore, a gift will be enclosed in each officer's packet in appreciation for their participation. A follow-up letter will be provided to you mid July, 1999, in order to distribute to your officers.

The information that your officers provide will serve as an essential resource in increasing insight into police stress and its effects on police officers. This information will also help in the development of additional support programs for law enforcement officers to reduce stress-related illness, burnout, and other related problems. Once all of the data has been collected and analyzed, a copy of an abstract report of my research findings will be provided to you to post for you and your officers to review.

If you have any questions, comments or concerns, feel free to contact me at the Buchanan Police Department at (616) 695-5120, at home at (616) 695-8319, or my dissertation Chair, Dr. Lenore Brantley at (616) 471-3491. Thank you for your support.

Sincerely,

Harvey Burnett
Graduate Student
Department of Educational and Counseling Psychology
Andrews University

Enclosures

APPENDIX C

QUESTIONNAIRES

DEMOGRAPHIC QUESTIONNAIRE

Please answer the following questions by circling the appropriate numbers.

1. Gender.
(1) Male
(2) Female

2. Ethnic Identity.
(1) Caucasian
(2) African American
(3) Hispanic/Latino
(4) Native/Alaskan American
(5) Asian
(6) Other

3. Write down your number of years of law enforcement experience: _____

4. Educational Level.
(1) H. S. Diploma/GED
(2) Some College
(3) Associate's Degree
(4) Bachelor's Degree
(5) Master's Degree
(6) Other

5. Type of Law Enforcement Agency.
(1) City
(2) County
(3) State
(4) Township
(5) Village

6. Present Work Assignment.
(1) Patrol
(2) Patrol & Traffic
(3) Traffic
(4) D.A.R.E., Community Policing, School Liaison, etc.
(5) Investigative (i.e., Detective, Narcotics, etc.)
(6) Administrative
(7) Other

7. Type of Community You Mostly Serve.
(1) Urban
(2) Suburban
(3) Rural
(4) Other

8. Current Rank/Job Title.
(1) Police Officer/Patrolman/Patrolwoman
(2) Sheriff Deputy
(3) State Trooper
(4) Sergeant/Detective Sergeant
(5) Command (i.e., Lieutenant, Chief, Sheriff, etc.)

9. Your Marital Status.
(1) Married
(2) Divorced
(3) Separated
(4) Single
(5) Widowed

10. Your Regular Shift Hours.
(1) 8 hour shifts
(2) 10 hour shifts
(3) Other

11. Your Shift Rotation Schedule.
(1) Monthly (i.e., every 28 days)
(2) Bimonthly (i.e., every 2 months)
(3) Weekly
(4) Permanent (i.e., days, afternoon, or midnights)
(5) Other

12. Religious Affiliation.
(1) None
(2) Catholic
(3) Methodist
(4) Lutheran
(5) Seventh-day Adventist
(6) Non-denominational
(7) Baptist
(8) Other

13. How Often Do You Attend Religious Services A Month.
(1) Never
(2) 1-2 times
(3) 3-4 times
(4) 5 or more

14. Write the year you were born:_____

POLICE STRESS SURVEY

Developed by:

Charles D. Spielberger, Kenneth S. Grier, Charles S. Salerno, and Joel M. Pate (1981)

It is generally recognized that law enforcement is a highly stressful occupation and that stress can have serious effects on the lives of police officers and their families. The purpose of the survey is to determine *your* perception of important sources of stress in police work. This survey contains a list of job events that have been identified by police officers as stressful. Please read each event (item) and rate it on the *amount* of stress associated with the event.

Please indicate the relative amount of stress that you feel is associated with each event. You may or may not have experienced each of the events listed throughout your law enforcement career. In making rating, use all of your knowledge and experience, and take into account the amount of time and energy that you feel would be necessary in adjusting or coping with the event. In other words, base your ratings on your personal experience as well as what you have learned to be the case for other officers. Since some people adapt to change more readily than others, please give your opinion of the average amount of stress and readjustment that you feel is associated with each event.

For each event, circle the appropriate number that corresponds to the amount of stress you associate with each event. If you feel an event is highly stressful, you should circle 5. If you feel an event is moderate to highly stressful, you should circle 4. If you feel an event is moderately stressful, you should circle 3. If you feel an event is low to moderately stressful, you should circle 2. If you feel an event is low in stress, you should circle 1.

Do not write your name on this survey form. Your cooperation in assisting us to complete this important project is greatly appreciated.

Police Stress Survey

Carefully read each job event and circle the number which best describes the relative amount of stress that you feel you may or may not have experienced with each event. Please use the following scale:

Low Stress	Low/ Moderate Stress	Moderate Stress	Moderate/ High Stress	High Stress
1	2	3	4	5

1.	Assignment of disagreeable duties.	1	2	3	4	5
2.	Changing from day to night shift.	1	2	3	4	5
3.	Assignment to new or unfamiliar duties.	1	2	3	4	5
4.	Fellow officers not doing their job.	1	2	3	4	5
5.	Court leniency with criminals.	1	2	3	4	5
6.	Political pressure from within the department.	1	2	3	4	5
7.	Political pressure from outside the department.	1	2	3	4	5
8.	Incapacitating physical injury on the job.	1	2	3	4	5
9.	Working a second job.	1	2	3	4	5
10.	Strained relations with non-police friends.	1	2	3	4	5
11.	Exposure to death of civilians.	1	2	3	4	5
12.	Inadequate support by supervisor.	1	2	3	4	5
13.	Inadequate support by department.	1	2	3	4	5
14.	Court appearances on day off or day following night shift.	1	2	3	4	5
15.	Assignment of incompatible partner.	1	2	3	4	5
16.	Delivering a death notification.	1	2	3	4	5
17.	Periods of inactivity and boredom.	1	2	3	4	5
18.	Dealing with family disputes and crisis situations.	1	2	3	4	5
19.	High speed chases	1	2	3	4	5
20.	Difficulty getting along with supervisors.	1	2	3	4	5
21.	Responding to a felony in progress.	1	2	3	4	5
22.	Experiencing negative attitudes toward police officers.	1	2	3	4	5
23.	Public criticism of police.	1	2	3	4	5
24.	Disagreeable departmental regulations.	1	2	3	4	5
25.	Confrontations with aggressive crowds.	1	2	3	4	5
26.	Fellow officer killed in the line of duty.	1	2	3	4	5
27.	Distorted or negative press accounts of police.	1	2	3	4	5
28.	Making critical on-the-spot decisions.	1	2	3	4	5
29.	Ineffectiveness of the judicial system.	1	2	3	4	5
30.	Ineffectiveness of the correctional system.	1	2	3	4	5

		Low Stress	Low/ Moderate Stress	Moderate Stress	Moderate/ High Stress		High Stress	
		1	2	3	4		5	
31.	Personal insult from citizen.	1	2	3	4	5		
32.	Insufficient manpower to adequately handle a job.	1	2	3	4	5		
33.	Lack of recognition for good work.	1	2	3	4	5		
34.	Excessive or inappropriate discipline.	1	2	3	4	5		
35.	Performing non-police tasks.	1	2	3	4	5		
36.	Demands made by family for more time.	1	2	3	4	5		
37.	Promotion or commendation.	1	2	3	4	5		
38.	Inadequate or poor quality equipment.	1	2	3	4	5		
39.	Assignment of increased responsibility.	1	2	3	4	5		
40.	Racial pressures or conflicts.	1	2	3	4	5		
41.	Lack of participation on policy-making decisions.	1	2	3	4	5		
42.	Inadequate salary.	1	2	3	4	5		
43.	Accident in a patrol car.	1	2	3	4	5		
44.	Physical attack on one's person.	1	2	3	4	5		
45.	Demands for high moral standards.	1	2	3	4	5		
46.	Situations requiring use of force.	1	2	3	4	5		
47.	Job conflict (by-the-book vs. by-the-situation).	1	2	3	4	5		
48.	Court decisions unduly restricting police.	1	2	3	4	5		
49.	Killing someone in the line of duty.	1	2	3	4	5		
50.	Making arrests while alone.	1	2	3	4	5		
51.	Public apathy toward police.	1	2	3	4	5		
52.	Competition for advancement	1	2	3	4	5		
53.	Poor or inadequate supervision.	1	2	3	4	5		
54.	Exposure to battered or dead children.	1	2	3	4	5		
55.	Plea bargaining and technical rulings leading to case dismissal.	1	2	3	4	5		
56.	Frequent changes from boring to demanding activities.	1	2	3	4	5		
57.	Exposure to adults in pain.	1	2	3	4	5		
58.	Possibility of minor physical injury on the job.	1	2	3	4	5		
59.	Put-downs and mistreatment of police officers in court.	1	2	3	4	5		
60.	Excessive paperwork.	1	2	3	4	5		

OPINIONS ABOUT SOCIAL PROBLEMS

This questionnaire is aimed at understanding how people think about social problems. Different people often have different opinions about questions of right and wrong. There are no "right" answers in the way that there are right answers to math problems. We would like you to tell us what you think about several problem stories. The papers will be fed to a computer to find the average for the whole group, and no one will see your individual answers.

Please give us the following information:

Name _____ _____female

Age _____Class and period _____ _____male

School_____

* * * * * * * * *

In this questionnaire you will be asked to give your opinions about several stories. Here is a story as an example.

Frank Jones has been thinking about buying a car. He is married, has two small children and earns an average income. The car he buys will be his family's only car. It will be used mostly to get to work and drive around town, but sometimes for vacation trips also. In trying to decide what car to buy, Frank Jones realized that there were a lot of questions to consider. Below there is a list of some of these questions.

If you were Frank Jones, how important would each of these questions be in deciding what car to buy?

Instructions for Part A: (Sample Question)

On the left hand side check one of the spaces by each statement of a consideration. (For instance, if you think that statement #1 is not important in making a decision about buying a car, check the space on the right.)

IMPORTANCE:

Great	Much	Some	Little	No	
				✓	1. Whether the car dealer was in the same block as where Frank lives. (Note that in this sample, the person taking the questionnaire did not think this was important in making a decision.)
✓					2. Would a *used* car be more economical in the long run than a *new* car. (Note that a check was put in the far left space to indicate the opinion that this is an important issue in making a decision about buying a car.)
		✓			3. Whether the color was green, Frank's favorite color.
				✓	4. Whether the cubic inch displacement was at least 200. (Note that if you are unsure about what "cubic inch displacement" means, then mark it "no importance.")
✓					5. Would a large, roomy car be better than a compact car.
				✓	6. Whether the front connibilies were differential. (Note that if a statement sounds like gibberish or nonsense to you, mark it "no importance.")

Instructions for Part B: (Sample Question)

From the list of questions above, select the most important one of the whole group. Put the number of the most important question on the top line below. Do likewise for your 2nd, 3rd and 4th most important choices. (Note that the top choices in this case will come from the statements that were checked on the far left-hand side—statements #2 and #5 were thought to be very important. In deciding what is the *most* important, a person would re-read #2 and #5, and then pick one of them as the *most* important, then put the other one as "second most important," and so on.)

MOST	2ND MOST IMPORTANT	3RD MOST IMPORTANT	4TH MOST IMPORTANT
5	2	3	1

HEINZ AND THE DRUG

In Europe a woman was near death from a special kind of cancer. There was one drug that doctors thought might save her. It was a form of radium that a druggist in the same town had recently discovered. The drug was expensive to make, but the druggist was charging ten times what the drug cost to make. He paid $200 for the radium and charged $2,000 for a small dose of the drug. The sick woman's husband, Heinz, went to everyone he knew to borrow the money, but he could only get together about $1,000, which is half of what it cost. He told the druggist that his wife was dying, and asked him to sell it cheaper or let him pay later. But the druggist said, "No, I discovered the drug and I'm going to make money from it." So Heinz got desperate and began to think about breaking into the man's store to steal the drug for his wife.

Should Heinz steal the drug? (Check one)

_____Should steal it _____Can't decide _____Should not steal it

IMPORTANCE:

Great	Much	Some	Little	No	
					1. Whether a community's laws are going to be upheld.
					2. Isn't it only natural for a loving husband to care so much for his wife that he'd steal?
					3. Is Heinz willing to risk getting shot as a burglar or going to jail for the chance that stealing the drug might help?
					4. Whether Heinz is a professional wrestler, or has considerable influence with professional wrestlers.
					5. Whether Heinz is stealing for himself or doing this solely to help someone else.
					6. Whether the druggist's rights to his invention have to be respected.
					7. Whether the essence of living is more encompassing than the termination of dying, socially and individually.
					8. What values are going to be the basis for governing how people act towards each other.
					9. Whether the druggist is going to be allowed to hide behind a worthless law which only protects the rich anyhow.
					10. Whether the law in this case is getting in the way of the most basic claim of any member of society.
					11. Whether the druggist deserves to be robbed for being so greedy and cruel.
					12. Would stealing in such a case bring about more total good for the whole society or not.

From the list of questions above, select the four most important:

Most important_____ Second most important_____

Third most important_____ Fourth most important_____

STUDENT TAKE-OVER

At Harvard University a group of students, called the Students for a Democratic Society (SDS), believe that the University should not have an army ROTC program. SDS students are against the war in Viet Nam, and the army training program helps send men to fight in Viet Nam. The SDS students demanded that Harvard end the army ROTC training program as a university course. This would mean that Harvard students could not get army training as part of their regular course work and not get credit for it towards their degrees.

Agreeing with the SDS students, the Harvard professors voted to end the ROTC program as a university course. But the President of the University stated that he wanted to keep the army program on campus as a course. The SDS students felt that the President was not going to pay attention to the faculty vote or to their demands.

So, one day last April, two hundred SDS students walked into the university's administration building, and told everyone else to get out. They said they were doing this to force Harvard to get rid of the army training program as a course.

Should the students have taken over the administration building? (Check one)

____Yes, they should take it over ____:Can't decide ____No, they shouldn't take it over

IMPORTANCE:

Great	Much	Some	Little	No	
					1. Are the students doing this to really help other people or are they doing it just for kicks?
					2. Do the students have any right to take over property that doesn't belong to them?
					3. Do the students realize that they might be arrested and fined, and even expelled from school?
					4. Would taking over the building in the long run benefit more people to a greater extent?
					5. Whether the president stayed withing the limits of his authority in ignoring the faculty vote.
					6. Will the takeover anger the public and give all students a bad name?
					7. Is taking over a building consistent with principles of justice?
					8. Would allowing one student take-over encourage many other student take-overs?
					9. Did the president bring this misunderstanding on himself by being so unreasonable and uncooperative.
					10. Whether running the university ought to be in the hands of a few administrators or in the hands of all the people.
					11. Are the students following principles which they believe are above the law?
					12. Whether or not university decisions ought to be respected by students.

From the list of questions above, select the four most important:

Most important_____ Second most important_____

Third most important_____ Fourth most important_____

ESCAPED PRISONER

A man had been sentenced to prison for 10 years. After one year, however, he escaped from prison, moved to a new area of the country, and took on the name of Thompson. For 8 years he worked hard, and gradually he saved enough money to buy his own business. He was fair to his customers, gave his employees top wages, and gave most of his own profits to charity. Then one day, Mrs. Jones, an old neighbor, recognized him as the man who had escaped from prison 8 years before, and whom the police had been looking for.

Should Mrs. Jones report Mr. Thompson to the police and have him sent back to prison? (Check one)

____Should report him ____Can't decide ____Should not report him

IMPORTANCE:

Great	Much	Some	Little	No	
					1. Hasn't Mr. Thompson been good enough for such a long time to prove he isn't a bad person?
					2. Everytime someone escapes punishment for a crime, doesn't that just encourage more crime?
					3. Wouldn't we be better off without prisons and the oppression of our legal systems?
					4. Has Mr. Thompson really paid his debt to society?
					5. Would society be failing what Mr. Thompson should fairly expect?
					6. What benefits would prisons be apart from society, especially for a charitable man?
					7. How could anyone be so cruel and heartless as to send Mr. Thompson to prison?
					8. Would it be fair to all the prisoners who had to serve out their full sentences if Mr. Thompson was let off?
					9. Was Mrs. Jones a good friend of Mr. Thompson?
					10. Wouldn't it be a citizen's duty to report an escaped criminal, regardless of the circumstances?
					11. How would the will of the people and the public good best be served?
					12. Would going to prison do any good for Mr. Thompson or protect anybody?

From the list of questions above, select the four most important:

Most important_____ Second most important_____

Third most important_____ Fourth most important _____

THE DOCTOR'S DILEMMA

A lady was dying of cancer which could not be cured and she had only about six months to live. She was in terrible pain, but she was so weak that a good dose of pain-killer like morphine would make her die sooner. She was delirious and almost crazy with pain, and in her calm periods, she would ask the doctor to give her enough morphine to kill her. She said she couldn't stand the pain and that she was going to die in a few months anyway.

What should the doctor do? (Check one)

____He should give the lady an overdose that will make her die ____Can't decide ____Should not give the overdose

IMPORTANCE:

Great	Much	Some	Little	No	
					1. Whether the woman's family is in favor of giving her the overdose or not.
					2. Is the doctor obligated by the same laws as everybody else if giving her an overdose would be the same as killing her.
					3. Whether people would be much better off without society regimenting their lives and even their deaths.
					4. Whether the doctor could make it appear like an accident.
					5. Does the state have the right to force continued existence on those who don't want to live.
					6. What is the value of death prior to society's perspective on personal values.
					7. Whether the doctor has sympathy for the woman's suffering or cares more about what society might think.
					8. Is helping to end another's life ever a responsible act of cooperation.
					9. Whether only God should decide when a person's life should end.
					10. What values the doctor has set for himself in his own personal code of behavior.
					11. Can society afford to let everybody end their lives when they want to.
					12. Can society allow suicides or mercy killing and still protect the lives of individuals who want to live.

From the list of questions above, select the four most important:

Most important_____ Second most important_____

Third most important_____ Fourth most important_____

WEBSTER

Mr. Webster was the owner and manager of a gas station. He wanted to hire another mechanic to help him, but good mechanics were hard to find. The only person he found who seemed to be a good mechanic was Mr. Lee, but he was Chinese. While Mr. Webster himself didn't have anything against Orientals, he was afraid to hire Mr. Lee because many of his customers didn't like Orientals. His customers might take their business elsewhere if Mr. Lee was working in the gas station.

When Mr. Lee asked Mr. Webster if he could have the job, Mr. Webster said that he had already hired somebody else. But Mr. Webster really had not hired anybody, because he could not find anybody who was a good mechanic besides Mr. Lee.

What should Mr. Webster have done? (Check one)

_____Should have hired Mr. Lee _____Can't decide _____Should not have hired him

IMPORTANCE:

Great	Much	Some	Little	No	
					1. Does the owner of a business have the right to make his own business decisions or not?
					2. Whether there is a law that forbids racial discrimination in hiring for jobs.
					3. Whether Mr. Webster is prejudiced against orientals himself or whether he means nothing personal in refusing the job.
					4. Whether hiring a good mechanic or paying attention to his customers' wishes would be best for his business.
					5. What individual differences ought to be relevant in deciding how society's roles are filled?
					6. Whether the greedy and competitive capitalistic system ought to be completely abandoned.
					7. Do a majority of people in Mr. Webster's society feel like his customers or are a majority against prejudice?
					8. Whether hiring capable men like Mr. Lee would use talents that would otherwise be lost to society.
					9. Would refusing the job to Mr. Lee be consistent with Mr. Webster's own moral beliefs?
					10. Could Mr. Webster be so hard-hearted as to refuse the job, knowing how much it means to Mr. Lee?
					11. Whether the Christian commandment to love your fellow man applies in this case.
					12. If someone's in need, shouldn't he be helped regardless of what you get back from him?

From the list of questions above, select the four most important:

Most important_____ Second most important_____

Third most important_____ Fourth most important_____

NEWSPAPER

Fred, a senior in high school, wanted to publish a mimeographed newspaper for students so that he could express many of his opinions. He wanted to speak out against the war in Viet Nam and to speak out against some of the school's rules, like the rule forbidding boys to wear long hair.

When Fred started his newspaper, he asked his principal for permission. The principal said it would be all right if before every publication Fred would turn in all his articles for the principal's approval. Fred agreed and turned in several articles for approval. The principal approved all of them and Fred published two issues of the paper in the next two weeks.

But the principal had not expected that Fred's newspaper would receive so much attention. Students were so excited by the paper that they began to organize protests against the hair regulation and other school rules. Angry parents objected to Fred's opinions. They phoned the principal telling him that the newspaper was unpatriotic and should not be published. As a result of the rising excitement, the principal ordered Fred to stop publishing. He gave as a reason that Fred's activities were disruptive to the operation of the school.

Should the principal stop the newspaper? (Check one)

_____Should stop it _____Can't decide _____Should not stop it

IMPORTANCE:

Great	Much	Some	Little	No	
					1. Is the principal more responsible to students or to the parents?
					2. Did the principal give his word that the newspaper could be published for a long time, or did he just promise to approve the newspaper one issue at a time
					3. Would the students start protesting even more if the principal stopped the newspaper?
					4. When the welfare of the school is threatened, does the principal have the right to give orders to students?
					5. Does the principal have the freedom of speech to say "no" in this case?
					6. If the principal stopped the newspaper would he be preventing full discussion of important problems?
					7. Whether the principal's order would make Fred lose faith in the principal.
					8. Whether Fred was really loyal to his school and patriotic to his country.
					9. What effect would stopping the paper have on the student's education in critical thinking and judgments?
					10. Whether Fred was in any way violating the rights of others in publishing his own opinions.
					11. Whether the principal should be influenced by some angry parents when it is the principal that knows best what is going on in the school.
					12. Whether Fred was using the newspaper to stir up hatred and discontent.

From the list of questions above, select the four most important:

Most important_____ Second most important_____

Third most important_____ Fourth most important_____

COPING RESPONSE INVENTORY

We would now like to know how you cope or deal with hassles and problems that may be encountered in your job. Would you please think of the SPECIFIC HASSLE OR PROBLEM that has bothered you the most as a police officer during the past 6 months. Please list this hassle or problem in the space provided.

SPECIFIC HASSLE OR PROBLEM: _____

The following five questions relate to how you feel about the hassle or problem that you have listed. Could you please circle the appropriate number for each question, to indicate *how you currently feel* about the specific hassle or problem.

1.	Overall, how bothersome was the event or experience that you have listed?	Barely Bothersome 1	2	3	4	5	6	Extremely Bothersome 7
2.	How important was if for you to cope or deal effectively with the hassle or problem you have listed?	Not at all important 1	2	3	4	5	6	Extremely important 7
3.	How much control do you think you had over the event or experience?	No control at all 1	2	3	4	5	6	A lot of control 7
4.	Taking everything into account, how well do you feel you have coped with the hassle or problem?	Very badly 1	2	3	4	5	6	Very well 7
5.	To what extent is the hassle or problem still affecting you?	Not at all 1	2	3	4	5	6	Very much so 7

The following statements describe strategies that people may use to cope or deal with their hassles and problems. Would you please read each statement carefully and circle the number which best describes how much you used that strategy to cope or deal with the specific hassle or problem you listed on the previous page. Please use the following scale:

Not at all **Very much so**

0 1 2 3 4

1.	I considered several alternatives for handling the problem.	0	1	2	3	4
2.	I tried to step back from the situation and be more objective.	0	1	2	3	4
3.	I went over the situation in my mind to try and understand it.	0	1	2	3	4
4.	I tried to find out more about the situation.	0	1	2	3	4
5.	I talked to a spouse or other relative about the problem.	0	1	2	3	4
6.	I talked with a friend about the problem.	0	1	2	3	4
7.	I discussed my feelings with others.	0	1	2	3	4
8.	I sought help from persons or groups with similar experiences.	0	1	2	3	4
9.	I talked with other teachers/staff about the situation.	0	1	2	3	4
10.	I spoke to one of the school's managers about the situation.	0	1	2	3	4
11.	I took things a day at a time, one step at a time.	0	1	2	3	4
12.	I tried not to act too hastily or follow my first hunch.	0	1	2	3	4
13.	I knew what had to be done and tried harder to make things work.	0	1	2	3	4
14.	I bargained or compromised to get something positive from the situation.	0	1	2	3	4
15.	I tried to see the positive side of the situation.	0	1	2	3	4
16.	I got busy with other things to keep my mind off the problem.	0	1	2	3	4
17.	I told myself things that helped me feel better.	0	1	2	3	4
18.	I got away from things for a while.	0	1	2	3	4
19.	I made a promise to myself that things would be different next time.	0	1	2	3	4
20.	I exercised more to reduce tension.	0	1	2	3	4
21.	I let my feelings out somehow.	0	1	2	3	4
22.	I took it out on other people when I felt angry or depressed.	0	1	2	3	4
23.	I tried to reduce tension by drinking more.	0	1	2	3	4
24.	I tried to reduce tension by eating more.	0	1	2	3	4
25.	I tried to reduce tension by smoking more.	0	1	2	3	4
26.	I let off steam, e.g., 'spit the dummy'.	0	1	2	3	4
27.	I laughed at the problem.	0	1	2	3	4
28.	I joked about the problem.	0	1	2	3	4

REFERENCE LIST

Aardema, A. J., Luteijn, F., & Sanderman, R. (1997). Appraisal of responsibility: A new questionnaire and its relation to depression, rigid thoughts, and norms. European Journal of Psychological Assessment, 13(3), 216-218.

Adlam, K. R. (1982). The police personality: Psychological consequences of being a police officer. Journal of Police Science and Administration, 10(3), 344-349.

Alkus, S., & Padesky, C. (1983). Special problems of police officers: Stress-related issues and interventions. The Counseling Psychologist, 11(2), 55-64.

Allen, S. W. (1986). Suicide and indirect self-destruction behavior among police. In J. T. Reese & H. A. Goldstein (Eds.), Psychological services for law enforcement (pp. 413-417). Washington, DC: U.S. Government Printing Office.

Anderson, E. M. (1995). Stress and its correlates: An empirical investigation among North Dakota peace officers. Unpublished doctoral dissertation, The University of North Dakota.

Andersson, L. M. (1996). Employee cynicism: An examination using a contract violation framework. Human Relations, 49(11), 1395-1418.

Anson, R. H., & Bloom, E. (1988). Police stress in an occupational context. Journal of Police Science and Administration, 16(4), 229-235.

Baker, T., & Carter, D. L. (1994). Police deviance. Cincinnati, OH: Anderson Publishing Co.

Bartol, C. R. (1982). Psychological characteristics of small-town police officers. Journal of Police Science and Administration, 10(1), 58-63.

Beehr, T. A., Johnson, L. B., & Nieva, R. (1995). Occupational stress: Coping of police and their spouses. Journal of Organizational Behavior, 16(1), 3-25.

Beermann, B., & Nachreiner, F. (1995). Working shifts--different effects for women and men. Work and Stress, 9(2-3), 289-297.

Berg, G. E., Watson, C. G., Nugent, B., Gearhart, L. P., Juba, M., & Anderson, D. (1994). A comparison of combat's effects on PTSD scores in veterans with high and low moral development. Journal of Clinical Psychology, 50(5), 669-676.

Biggam, F. H., Power, K. G., & MacDonald, R. R. (1997). Coping with the occupational stressors of police work: A study of Scottish officers. Stress Medicine, 13, 109-115.

Billings, A. G., & Moos, R. H. (1984). Coping, stress, and social resources among adults with unipolar depression. Journal of Personality and Social Psychology, 46(4), 877-891.

Blanchard, J. L. (1991). Work attitudes and performance in human service workers. Unpublished doctoral dissertation, University of Denver, Denver, CO.

Blau, T. H. (1994). Psychological services for law enforcement. New York: Wiley.

Bonifacio, P. (1991). The psychological effects of police work: A psychodynamic approach. New York: Plenum Press.

Boyd, J. S. (1994). Police stress and police officer length of service. Unpublished doctoral dissertation, Texas A & M University.

Brandt, D. E. (1993). Social distress and the police. Journal of Social Distress and the Homeless, 2(4), 305-313.

Britz, M. T. (1994). The police subculture revisited: Unique occupational characteristics and perpetuation of police solidarity in small and medium sized departments. Unpublished doctoral dissertation, Michigan State University, Lansing.

Brown, J., Cooper, C., & Kirkcaldy, B. (1996). Occupational stress among senior police officers. British Journal of Psychology, 87(1), 31-41.

Brown, J., & Grover, J. (1998). The role of moderating variables between stressor exposure and being distressed in a sample of serving police officers. Personality and Individual Differences, 24(2), 181-185.

Brown, J. M., & Campbell, E. A. (1990). Sources of occupational stress in policing. Work and Stress, 4(4), 305-318.

Burke, R. J. (1989a). Career stages, satisfaction, and well-being among police officers. Psychological Reports, 65(1), 3-12.

Burke, R. J. (1989b). Examining the career plateau: Some preliminary findings. Canadian Police College Journal, 13(2), 77-86.

Burke, R. J. (1994). Stressful events, work-family conflict, coping, psychological burnout, and well-being among police officers. Psychological Reports, 75, 787-800.

Burke, R. J., & Kirchmeyer, C. (1990). Initial career orientations, stress and burnout in policeworkers. Canadian Police College Journal, 14(1), 28-36.

Burns, R. G. (1993). A study of motivation, job statisfaction, and demographic differences between Lexington county patrol officers and Nebraska patrol officers (South Carolina). Unpublished doctoral dissertation, University of South Carolina.

Buunk, B. P., & Verhoeven, K. (1991). Companionship and support at work: A microanalysis of the stress-reducing features of social interaction. Basic and Applied Social Psychology, 12(3), 243-258.

Card, J. J. (1987). Epidemiology of PTSD in a national cohort of Vietnam veterans. Journal of Clinical Psychology, 43, 6-17.

Carlier, I. V. E., Lamberts, R. D., Fouwels, A. J., & Gersons, B. P. R. (1996). PTSD in relation to dissociation in traumatized police officers. American Journal of Psychiatry, 153(10), 1325-1328.

Carter, D. L., & Stephens, D. W. (1994). An overview of issues concerning police officer drug use. In T. Barker & D. L. Carter (Eds.), Police Deviance (3rd ed., pp. 101-121). Cincinnati, OH: Anderson Publishing Co.

Damon, W. (1977). The social world of the child. San Francisco: Jossey-Bass.

Davison, M. L. (1979). The internal structure and the psychometric properties of the defining issues test. In Development in judging moral issues (pp. 223-245). Minneapolis: University of Minnesota Press.

Dietrich, J., & Smith, J. (1986). The nonmedical use of drugs including alcohol among police personal. Journal of Police Science and Administration, 14(4), 300-306.

Doctor, R. S., Curtis, D., & Isaacs, G. (1994). Psychiatric morbidity in policemen and effects of brief psychotherapeutic intervention: A pilot study. Stress Medicine, 10(3), 151-157.

Edworthy, A. (1987). Occupational stress in professional groups (Vols. 1 and 2) (shift work, public contact). Unpublished doctoral dissertation, University of Wales College of Cardiff (United Kingdom).

Ernsberger, D. J., & Manaster, G. J. (1981). Moral development, intrinsic/extrinsic religious orientation and denominational teachings. Genetic Psychology Monographs, 104, 23-41.

Evans, B. J., Coman, G. J., Stanley, R. O., & Burrows, G. D. (1993). Police officers' coping strategies: An Australian police survey. Stress Medicine, 9(4), 237-246.

Federal Bureau of Investigation. (1997). Uniform crime reports of law enforcement officers killed and assaulted. Washington, DC: U.S. Department of Justice.

Fin, P., & Tomz, J. E. (1997). Developing a law enforcement stress program for officers and their families. Washington, DC: U.S. Department of Justice.

Folkman, S., & Lazarus, R. S. (1980). An analysis of coping in a middle-aged community sample. Journal of Health and Social Behavior, 21, 219-239.

Folkman, S., Schaefer, C., & Lazarus, R. S. (1979). Cognitive processes as mediators of stress and coping. In V. Hamilton & D. M. Warburton (Eds.), Human stress and cognition (pp. 265-298). Chilchester, England: Wiley.

Franzen, M. D., & Heffernan, W. (1983). Patterns of coping, patterns of response. Paper presented at the 91st Annual Convention of the American Psychological Association, Anaheim, CA.

Gilmartin, K. M. (1986). Hypervigilance: A learned perceptual set and its consequences on police stress. In J. T. Reese & H. A. Goldstein (Eds.), Psychological services for law enforcement (pp. 445-448). Washington, DC: U.S. Government Printing Office.

Goodman, A. M. (1990). A model for police officer burnout. Journal of Business and Psychology, 5(1), 85-99.

Graf, F. A. (1986). The relationship between social support and occupational stress among police officers. Journal of Police Science and Administration, 14(3), 178-186.

Hageman, M. J. (1978). Occupational stress and marital relationships. Journal of Police Science and Administration, 6(4), 402-412.

Hart, P. J. (1988). Stress measurement and perceived quality of life amongst police officers. Unpublished Master of Arts preliminary thesis, University of Melbourne.

Hart, P. J., Wearing, A. J., & Headey, B. (1995). Police stress and well-being: Integrating personality, coping and daily work experiences. Journal of Occupational and Organizational Psychology, 68, 133-156.

Harvey-Lintz, T. (1994). Psychological effects of the 1992 Los Angeles riots: Post traumatic stress symptomatology among law enforcement officers. Unpublished doctoral dissertation, University of California, Los Angeles.

Hendin, H. H., & Hass, A. P. (1984). Combat adaptations of Vietnam veterans without posttraumatic stress disorder. American Journal of Psychiatry, 141, 956-960.

Higgins, J. N. (1996). Traumatic stress reactions in police (postraumatic stress disorder). Unpublished doctoral dissertation, University of Wollongong, Australia.

Hockstedler, E. (1981). Testing types: A review and test of police types. Journal of Criminal Justice, 9, 451-466.

Holaday, M., Warren-Miller, G., Smith, A., & Yost, T. E. (1995). A preliminary investigation of on-the-scene coping mechanisms used by disaster workers. Journal of Mental Health Counseling, 17(3), 347-359.

Hurrell, J. J. (1986). Some organizational stressors in police work and means for their amelioration. In J. T. Reese & H. A. Goldstein (Eds.), Psychological services for law enforcement (pp. 449-452). Washington, DC: U.S. Government Printing Office.

Hurrell, J. J., & Kroes, W. H. (1975). Stress awareness. In W. H. Kroes & W. H. Hurrell (Eds.), Job stress and the police officer (pp. 234-246). Washington, DC: U.S. Government Printing Office.

Jackson, H. C. (1982). The impact of combat stress on adolescent moral development in Vietnam veterans. Unpublished doctoral dissertation, Smith College.

Janik, J., & Kravitz, H. M. (1994). Linking work and domestic problems with police suicide. Suicide and Life Threatening Behavior, 24(3), 267-274.

Ji, C. (1995). A cross-cultural study of moral developmental theory: The influence of collectivism on moral reasoning of Asian students and Caucasian American students. Unpublished doctoral dissertation, Andrews University, Berrien Springs, MI.

Johnson, J. B. (1986). Theories of moral development and a Christian ethic of character: A comparative analysis of the works of Lawrence Kohlberg, James W. Fowler, and Stanley Hauerwas. Unpublished doctoral dissertation, Baylor University, Waco, Texas.

Kirkcaldy, B. D., Furnham, A., & Cooper, C. L. (1994). Police personality, job statisfaction and health. Studia Psychologica, 36, 55-63.

Kirkcaldy, B. D., Cooper, C. L., & Ruffalo, P. (1995). Work stress and health in a sample of U.S. police. Psychological Reports, 76(2), 700-702.

Kirkcaldy, B. D., Cooper, C. L., Shephard, R. J., & Brown, J. S. (1994). Exercise, job statisfaction and well-being among superintendent police officers. Special issue: Stress research in Europe. European Review of Applied Psychology, 44(2), 117-123.

Kleinig, J., & Zhang, Y. (1993). Professional law enforcement codes: A documentary collection. Westport, CT: Greenwood Press.

Kohlberg, L. (1969). Stage and sequence: The cognitive developmental approach to socialization. In D. A. Goslin (Ed.), Handbook of socialization theory and research (pp. 347-408). Chicago: Rand McNally.

Kohlberg, L. (1984). The psychology of moral development. San Francisco: Harper and Row.

Kooken, D. L. (1957). Ethics in police service. Springfield, IL: Charles C. Thomas.

Kroes, W. (1976). Society's victim--the policeman. Springfield, IL: Charles C. Thomas.

Kroes, W. H. (1985). Society's victims--the police: An analysis of job stress in policing. (2nd ed.). Springfield, IL: Charles C Thomas.

Kroes, W. H., Margolies, B. L., & Hurrell, J. J. (1974). Job stress in policemen. Journal of Police Science and Administration, 2(2), 145-155.

Kubany, E. S., Gino, A., Denny, N. R., & Torigoe, R. Y. (1994). Relationship of cynical hostility and PTSD among Vietnam veterans. Journal of Traumatic Stress, 7, 21-31.

Kuczynski, L., Marshall, S., & Schell, K. (1997). Value socialization in a bidirectional context. In J. E. Grusec & L. Kuczynski (Eds.), Parenting and children's internalization of values (pp. 23-50). New York: John Wiley.

Lanagan-Fox, J., Deery, T., & van Vliet, S. (1997). Power, motivation, illness, coping strategies and psychological stress in police trainees. Work and Stress, 11(2), 186-195.

Lauferweiler, D. L. (1995). Organizational stress: A tri-level anaylsis of the factors which affect perceived stress. Unpublished doctoral dissertation, Virginia Commonwealth University, Richmond.

Lazarus, R. S. (1966). Psychological stress and the coping process. New York: McGraw-Hill.

Lazarus, R. S. (1981). The stress and coping paradigm. In C. Eisdorfer, D. Cohen, A. Kleinman, & P. Maxim (Eds.), Models for clinical psychopathology (pp. 117-214). New York: Spectrum.

Lazarus, R. S., & Folkman, S. (1984). Stress, appraisal, and coping. New York: Springer.

Lazarus, R. S., Kanner, A., & Folkman, S. (1980). Emotions: A cognitive-phenomenological analysis. In R. Plutchik & H. Kellerman (Eds.), Theories of emotion (pp. 189-217). New York: Academic Press.

Lazarus, R. S., & Launier, R. (1978). Stress-related transactions between person and environment. In L. A. Pervin & M. Lewis (Eds.), Perspectives in interactional psychology (pp. 287-327). New York: Plenum.

Lefkowitz, J. (1977). Industrial-organizational psychology and the police. American Psychologist, 32, 346-364.

Lehrfeld, D. I. (1989). Personality configuration, occupational stress, and alcohol usage: Testing a model and its relationship to police performance. Unpublished doctoral dissertation, California School of Professional Psychology, Los Angeles.

Lerner, R. M. (1976). Concepts and themes of human development. Reading, MA: Addison-Wesley.

Lord, V. B. (1992). Changes in social support sources of new law enforcement officers (police recruits, stress). Unpublished doctoral dissertation, North Carolina State University.

Machell, D. F. (1993). Combat post-traumatic stress disorder, alcoholism, and the police officer. Journal of Alcohol and Drug Education, 38(2), 23-32.

Mann, J. P., & Neece, J. (1990). Workers' compensation for law enforcement related post traumatic stress disorder. Behavioral Sciences and the Law, 8(4), 447-456.

Mantell, M. R. (1986). San Ysidro: When the badge turns blue. In J. T. Reese & H. A. Goldstein (Eds.), Psychological services for law enforcement (pp. 357-360). Washington, DC: U.S. Government Printing Office.

Marin, P. (1981, November). Living in moral pain. Psychology Today, 15, 68-80.

Martelli, T. A., Waters, L. K., & Martelli, J. (1989). The police stress survey: Reliability and relation to job satisfaction and organizational commitment. Psychological Reports, 64, 267-273.

Mayes, B. T., Barton, M. E., & Ganster, D. C. (1991). An exploration of the moderating effect of age on job stressor-employee strain relationships. Special issue: Handbook on job stress. Journal of Social Behavior and Personality, 6(7), 289-308.

McCafferty, F. L., McCafferty, E., & McCafferty, M. A. (1992). Stress and suicide in police officers: A paradigm of occupational stress. Southern Medical Journal, 85, 233-243.

McCrae, R. R. (1982). Age differences in the use of coping mechanisms. Journal of Gerontology, 37, 454-460.

McCrae, R. R. (1984). Situational determinants of coping responses: Loss, threat, and challenge. Journal of Personality and Social Psychology, 46(4), 919-928.

McGeorge, C. (1975). The susceptibility to faking of the Defining Issues Test of moral development. Developmental Psychology, 11, 108.

Menaghan, E. G. (1983). Individual coping efforts and family studies: Conceptual and methodological issues. Marriage and Family Review, 6, 113-135.

Menzel, D. C. (1993). Ethics induced stress in the local government workplace. Public Personnel Management, 22(4), 523-536.

Michigan Department of State Police. (1997). Crime in Michigan: 1997 uniform crime report (39th ed.). East Lansing, MI: Department of State Police.

Michigan Department of State Police (1999). Crime in Michigan: 1999 uniform crime report (41st ed.). East Lansing, MI: Department of State Police.

Myers, M. E. (1996). Police stress and Gestalt contact styles. Unpublished doctoral dissertation, Kent State University.

Nielsen, E. (1986). Understanding and assessing traumatic stress reactions. In J. T. Reese & H. A. Goldstein (Eds.), Psychological services for law enforcement (pp. 369-374). Washington, DC: U.S. Government Printing Office.

Neirenberg, A. A., Ghaemi, S. N., Clancy-Colecchi, K., Rosenbaum, J. F., & Fava, M. (1996). Cynicism, hostility, and suicidal ideation in depressed outpatients. The Journal of Nervous and Mental Disease, 184(10), 607-610.

Niederhoffer, A. (1967). Behind the shield: The police in urban society. New York: Holt, Rinehart, and Winston.

O'Neil, P. S. (1986). Shift work. In J. T. Reese & H. A. Goldstein (Eds.), Psychological services for law enforcement (pp. 471-478). Washington, DC: U.S. Government Printing Office.

Paton, D. & L. Smith (1999). Assessment, conceptual and methodological issues in researching traumatic stress in police officers. In J. Violanti & D. Paton (Eds.), Police Trauma (pp. 13-24). Springfield, IL: Charles C. Thomas.

Patterson, G. T. (1999). Coping effectiveness and occupational stress in police officers. In J. Violanti & D. Paton (Eds.), Police Trauma (pp. 214-226). Springfield, IL: Charles C. Thomas.

Pendergrass, V. E., & Ostrove, N. M. (1986). Correlates of alcohol use by police personnel. In J. T. Reese & H. A. Goldstein (Eds.), Psychological services for law enforcement (pp. 489-495). Washington, DC: U.S. Government Printing Office.

Perrott, S. B., & Taylor, D. M. (1994). Ethnocentrism and authoritarianism in the police: Challenging stereotypes and reconceptualizing ingroup identification. Journal of Applied Social Psychology, 24(18), 1640-1664.

Piaget, J. (1965). The moral judgment of the child (M. Gabain, Trans.). New York: The Free Press.

Pierce, J. L., & Dunham, R. B. (1992). The 12-hour work day: A 48 hour, eight-day week. Academy of Management Journal, 35(5), 1086-1098.

Rest, J. (1979). Development in judging moral issues. Minneapolis: University of Minnesota Press.

Rest, J. (1986a). Manual for the defining issues test (3rd ed.). Minneapolis, MN: Center for the Study of Ethical Development, University of Minnesota.

Rest, J. (1986b). Moral development: Advances in research and theory. New York: Praeger.

Rest, J., Narvaez, D., Bebeau, M. J., & Thomas, S. J. (1999). Postconventional moral thinking: A neo-Kohlbergian approach. University of Minnesota; Center for the Study of Ethical Development.

Rodichok, G. J. (1995). A quantitative and qualitative survey of job stress among African-American police officers. Unpublished doctoral dissertation, Temple University.

Rosenbluh, E. S. (1986). Police burnout: Increasing durability to stress illness through the body's own chemistry. In J. T. Reese & H. A. Goldstein (Eds.), Psychological services for law enforcement (pp. 501-513). Washington, DC: U.S. Government Printing Office.

Rosse, J. G., Boss, R. W., Johnson, A. E., & Crown, D. F. (1991). Conceptualizing the role of self-esteem in the burnout process. Group and Organizational Studies, 16(4), 428-451.

Schnurr, P. P., Friedman, M. J., & Rosenberg, S. D. (1993). Premilitary MMPI scores as predictors of combat-related PTSD symptoms. American Journal of Psychiatry, 150, 479-483.

Selman, R. (1976). Toward a structural analysis of developing interpersonal relationship concepts: Research with normal and disturbed preadolescent boys. In A. Pick (Ed.), Tenth annual Minnesota symposia on child psychology. Minneapolis: University of Minnesota Press.

Selye, H. (1974). Stress without distress. New York: J. B. Lippincott Co.

Selye, H. (1976). Stress in health and disease. Reading, MA: Butterworths.

Selye, H. (1984). The stress of life (Revised ed.). New York: McGraw-Hill.

Shalom, D., Benbenishty, R., & Solomon, Z. (1995). Mental health officers' casual explanations of combat stress reaction. Journal of Traumatic Stress, 8(2), 259-269.

Simon, W. (1950). Attempted suicide among veterans. Journal of Nervous and Mental Disorders, 111, 451-468.

Solomon, R. M., & Horn, J. M. (1986). Post-shooting traumatic reactions: A pilot study. In J. T. Reese & H. A. Goldstein (Eds.), Psychological services for law enforcement (pp. 383-394). Washington, DC: U.S. Government Printing Office.

Spielberger, C., Westberry, L., Grier, K., & Greenfield, G. (1981). The police stress survey: Sources of stress in law enforcement. Tampa, FL: Human Resources Institute.

Spielberger, C. D., Grier, K. S., & Pate, J. M. (1980, Winter). The Florida police stress survey. Florida Fraternal Order of Police, 66-68.

Spielberger, C. D., Ward, J. C., & Spaulding, H. C. (1979). A model for the selection of law enforcement officers. In C. D. Spielberger (Ed.), Police selection and evaluation: Issues and techniques (pp. 11-29). New York: Praeger/Holt, Reinhart and Winston.

Stotland, E. (1986). Police stress and strain as influenced by police self-esteem, time on job, crime frequency and interpersonal relationships. In J. T. Reese & H. A. Goldstein (Eds.), Psychological services for law enforcement (pp. 521-525). Washington, DC: U.S. Governement Printing Office.

Stratton, J. (1984). Police passages. Manhattan Beach, CA: Glennon.

Symonds, M. (1970). Emotional hazards of police work. American Journal of Psychoanalysis, 30, 155-160.

Terry, W. C. (1983). Police stress as an individual and administrative problem: Some conceptual and theoretical difficulties. Journal of Police Science and Administration, 11(2), 156-165.

Toch, H. (1996). The violence-prone police officer. In W. Geller & H. Toch (Eds.), Police violence: Understanding and controlling police abuse of force (pp. 94-112). New Haven: Yale University Press.

Turiel, E. (1974). Conflict and transition in adolescent moral development. Child Development, 45, 14-29.

Van Essen, D. M. (1990). A comparative study of cumulative-traumatic stress disorder in male and female police officers (posttraumatic stress disorder). Unpublished doctoral dissertation, The Union Institute.

Violanti, J. M. (1981). Police stress and coping: An organizational analysis. Unpublished doctoral dissertation, State University of New York at Buffalo.

Violanti, J. M. (1983). Stress patterns in police work: A longitudinal study. Journal of Police Science and Administration, 11(2), 211-216.

Violanti, J. M. (1985). The police stress process. Journal of Police Science and Administration, 13, 106-110.

Violanti, J. M. (1996a). Police suicide: Epidemic in blue. Springfield, IL: Charles C. Thomas.

Violanti, J. M. (1996b). Trauma stress and police work. In D. Paton & J. Violanti (Eds.), Traumatic Stress in Critical Occupations (pp. 87-112). Springfield, IL: Charles C. Thomas.

Violanti, J. M. (1999). Trauma in police work: A psychosocial model. In J. Violanti & D. Paton (Eds.), Police Trauma (pp. 88-96). Springfield, IL: Charles C. Thomas.

Violanti, J. M., & Aron, F. (1993). Sources of police stressors, job attitudes, and psychological distress. Psychological Reports, 72, 899-904.

Violanti, J. M., & Aron, F. (1994). Ranking police stressors. Psychological Reports, 75, 824-826.

Violanti, J. M., & Marshall, J. R. (1983). The police stress process. Journal of Police Science and Administration, 11(4), 389-394.

Violanti, J. M., Marshall, J. R., & Howe, B. (1985). Stress, coping, and alcohol use: The police connection. Journal of Police Science and Administration, 13(2), 106-110.

Wallet, K. A. (1994). Occupation as a police officer and its effects on marital satisfaction (stress). Unpublished doctoral dissertation, Kansas State University.

Watson, C. G., Kucala, T., Manifold, V., Juba, M., & Vassar, P. (1988). Relationship of post-traumatic stress disorder to adolescent illegal activities, drinking and employment. Journal of Clinical Psychology, 44, 592-598.

Wearing, A. J., & Hart, P. M. (1996). Work and non-work coping strategies: Their relation to personality, appraisal and life domain. Stress Medicine, 12, 93-103.

Wexler, J. G., & Logan, D. D. (1983). Sources of stress among women police officers. Journal of Police Science and Administration, 2(1), 46-53.

White, J., & Manolis, C. (1997). Individual differences in ethical reasoning among law students. Social Behavior and Personality, 25(1), 19-48.

Williams, C. (1987). Peacetime combat: Treating and preventing delayed stress reactions in police officers. In T. Williams (Ed.), Post-traumatic stress disorders: A handbook for clinicians (pp. 267-292). Cincinnati, OH: Disabled American Veterans.

Williams, J. L. (1992). Factors related to post-traumatic stress disorder among police officers (stress disorders, deadly force, child victims, posttraumatic stress disorder). Unpublished doctoral dissertation, Oklahoma State University.

Wilson, J. (1978). Identity, ideology and crisis: The Vietnam veteran in transition. Unpublished paper, Cleveland State University.

Winter, D. A. (1993). Slot rattling from law enforcement to lawbreaking: A personal construct theory explanation of police stress. International Journal of Personal Construct Psychology, 6(3), 253-267.

Wojciszke, B. (1994). Multiple meanings of behavior: Constructing actions in terms of competence and morality. Journal of Personality and Social Psychology, 67, 222-232.

Wojciszke, B. (1997). Parallels between competence versus morality-related traits and individualistic versus collectivistic values. European Journal of Social Psychology, 27, 245-256.

Wolford, R. D. (1993). The relationship among police stressors, coping strategies, alcohol expectancy, and drinking patterns for law enforcement officers. Unpublished doctoral dissertation, Northern Illinois University, DeKalb.

Worden, R. E. (1996). The causes of police brutality: Theory and evidence on police use of force. In W. A. Geller & H. Toch (Eds.), Police violence: Understanding and controlling police abuse of force (pp. 23-51). New Haven: Yale University Press.

Wygant, S. A., & Williams, R. N. (1995). Perceptions of a principled personality: An interpretative examination of the Defining Issues Test. Journal of Social Behavior and Personality, 10(1), 53-66.

Yussen, S. R. (1976). Moral reasoning from the perspective of others. Child Development, 47, 551-555.

VITA

Harvey John Burnett, Jr.
517 Liberty Street
Buchanan, Michigan 49107
(616) 695-8319

EDUCATION

Andrews University, Berrien Springs, Michigan
Ph.D. Counseling Psychology
Expected: May 2001

Dissertation: A Study of the Relationship Between Police Stress and Moral Reasoning, Coping Mechanisms, and Selected Demographic Variables

Dissertation Chair: Dr. Lenore Brantley

Andrews University, Seventh-day Adventist Theological Seminary, Berrien Springs, Michigan
M.Div. (Master of Divinity)
Conferred: June 1994

University of Michigan (Dearborn Campus), Dearborn, Michigan
B.A. Psychology
Graduated: May 1991

CLINICAL EXPERIENCE

VILLAGE OF HOFFMAN ESTATES DEPARTMENT OF HEALTH AND HUMAN SERVICES: Hoffman Estates, IL, Psychological Intern (August 1999 to August 2000)

- Provided outpatient therapy to adults, adolescents, and children under licensed supervision. Treatment was provided for individuals, couples, and families from the Hoffman Estates community
- Served as group facilitator for the Confidence Building and Self-Esteem Group
- Designed and conducted a number of prevention programs for Village residents
- Responsible for intakes and participated in the assignment of cases to clinical staff
- Developed and implemented a Law Enforcement stress training program for the Village Police Department and the Lion's Pride program for at-risk youth at Lakeview Elementary School
- Participated in 12 hours of clinical supervision per week. Supervision and didactics were provided for all modalities, including taped review and live supervision

PSYCHOTHERAPY AND COUNSELING: Andrews University, Counseling and Psychological Services Center, Berrien Springs, MI, Doctoral Therapy Practicum (1995-1998)

- Provided outpatient therapy to adults, adolescents, and children to university students and community clients under licensed supervision. Treatment was provided for individuals, couples, and families
- Served as a growth group co-facilitator for university students in an introductory psychology course and Transforming Acting Out Behaviors (TAB) groups at a elementary school within the Benton Harbor School District
- Administration and interpretation of psychological assessment instruments for university and community clients

PROFESSIONAL EXPERIENCE

1995 - Present — *City of Buchanan, Buchanan Police Department*, Buchanan, MI.
Police Officer: performed various law enforcement responsibilities; including community policing efforts and D.A.R.E. instruction to grades K-6.

6/95 - 9/95 — *Benton Harbor Workforce Skills Training Center*, Benton Harbor, MI.
Counselor: facilitated Life Skills groups, administered and scored standardized achievement tests, and computer training skills instruction.

1991 -1995 — *Andrews University, Community Services Assistantship Program*, Berrien Springs, MI.
Male Responsibility Mentoring Program/Youth Empowerment Project Coordinator: organized, developed, facilitated and supervised program operations and expansion of At-risk African American male youth mentoring groups within an elementary and middle school in Benton Harbor Area Schools. Other responsibilities included writing grant proposals, budget projections, workshop/lecture presentations, community relations, and selection and supervision of mentoring staff.

3/91 - 6/91 — *The Detroit Urban League*, Male Responsibility Program, Detroit, MI.
Save A Father Save A Family Project Coordinator: facilitated, developed and supervised project operations for At-risk African American fathers within the Detroit urban community.

COMMUNITY SERVICE EXPERIENCE

1993 - 1995 — *Benton Charter Township Police Department*, Benton Township, MI.
Auxiliary Police Officer: assisted and supported Benton Township Police Officers with various law enforcement activities and functions.

1984 - 1991 — *Detroit Police Department*, Police Reserve Section, Detroit, MI.
Detroit Police Reserve Officer: assisted and supported Detroit Police Officers with various law enforcement activities and functions.

MILITARY

1985 - 1987 — *United States Air Force*, Law Enforcement Specialist: performed all military base law enforcement and security duties.

AWARDS

- Outstanding D.A.R.E. Officer Performance Award, Buchanan Community Schools in 1998
- Co-Buchanan Police Officer of the Year in 1996, Buchanan Police Officer of the Year in 1998
- M.L.E.O.T.C. Outstanding Performance Award in 1995

PROFESSIONAL ORGANIZATIONS

- Student Affiliate, American Psychological Association, 1997 - Present